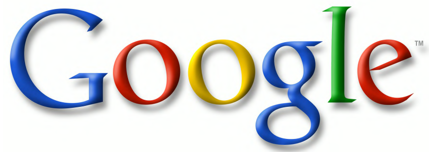

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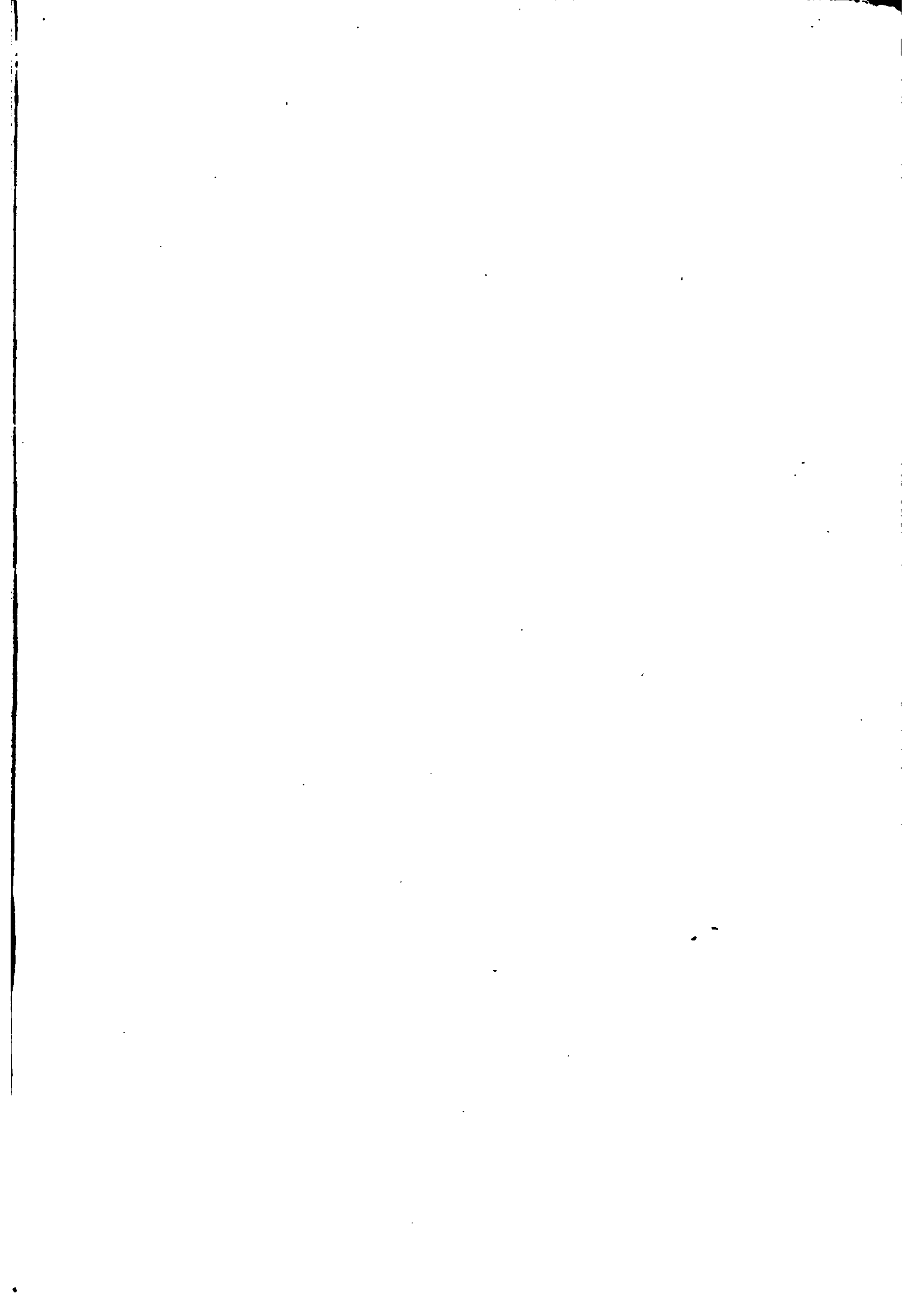

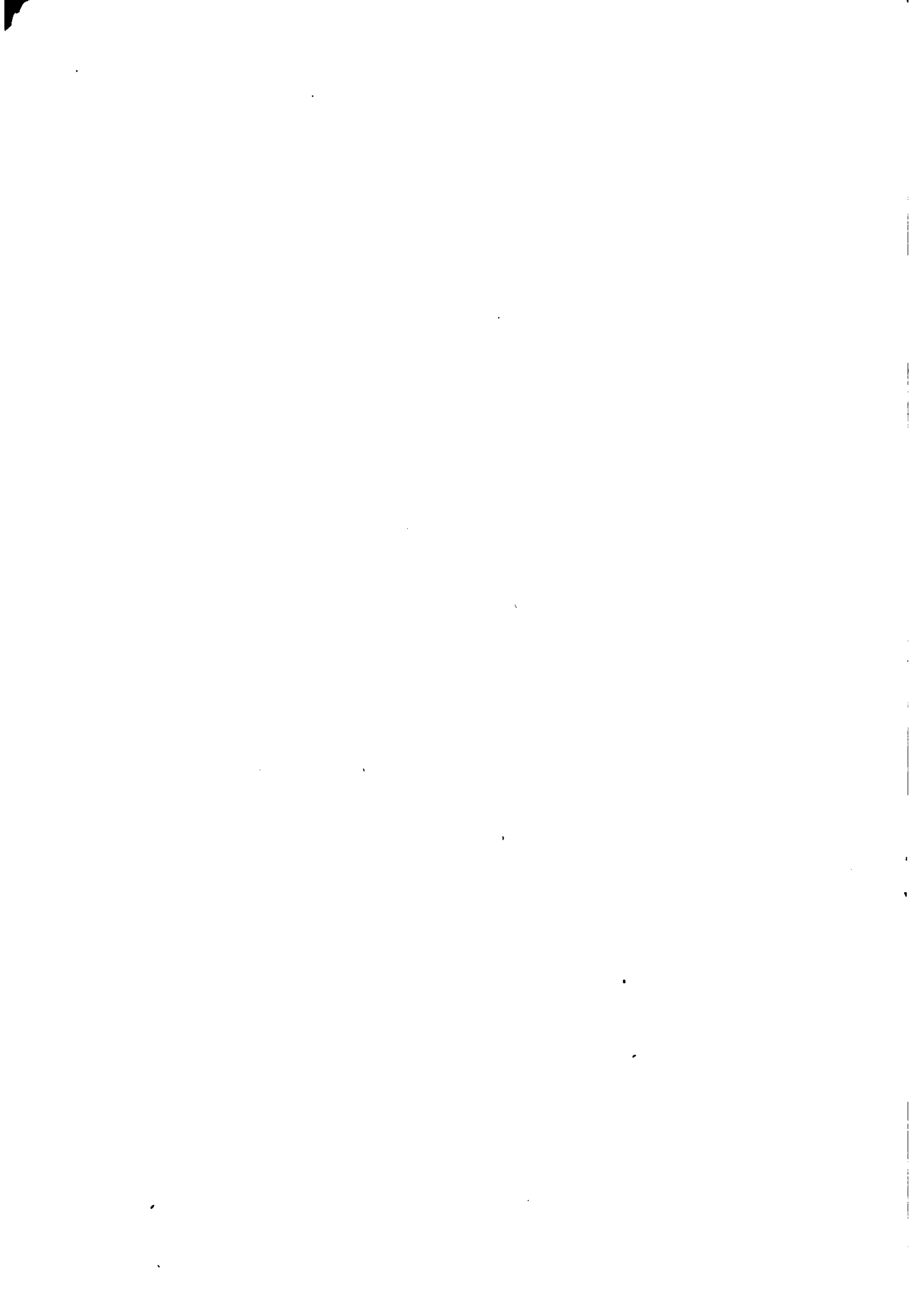

UNIV. OF CALIFORNIA

THE SCHOOL OF APPLIED BUSINESS SCIENCE

GENERAL ACCOUNTING

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DEAN

VOLUME II

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GENERAL INSTRUCTIONS

The practical work in connection with this volume will be different from the practical work in connection with Volume 1.

The main subjects discussed in Volume 2 are the preparation of statements of income and profit and loss, depreciation, and partnership and corporation accounting. In connection with the questions following the lessons you will find a number of practical problems to work, such as might be asked in any C. P. A. examination, which have been designed to bring out the theory developed in the text. You are therefore asked to lay aside your binders marked Accounting Records and General and Subsidiary Ledgers until after you have completed the work of the present volume. Then in Volume 3 you will find business transactions similar to those in the back of Volume 1 which will give you practical experience in opening and closing the books of partnerships and corporations and in preparing therefrom balance sheets and statements of income and profit and loss, and consolidated statements, with the detailed bookkeeping work eliminated.

The questions appearing at the end of any lesson in this volume do not necessarily refer to that particular lesson. Some of the questions asked are in the nature of review; others are included to test the ability of the student to apply the theory outlined anywhere in the text up to the time the question is asked.

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LESSON 19

STATEMENT OF INCOME AND PROFIT AND LOSS
PRELIMINARY SURVEY

1. Balance Sheet and Statement of Income and Profit and Loss Contrasted

The balance sheet as a medium of conveying information concerning the financial condition of a business as at any given date has been discussed. We have next to consider the statement of income and profit and loss as a means of reporting how profits have been realized or losses have been sustained during a given period.

In connection with the balance sheet, remember that it is always *as of a certain date,* whereas the income statement always covers a *certain period.*

The business world has found it convenient to divide its activities into accounting periods, conforming with calendar units but varying according to the needs of a particular business from one day, to one week, to one month, to six months, to one year.

It has become the almost universal practice for every business house to stop regularly once in so often to take a flashlight picture of itself, so to speak, and also to review the past in order to account for any changes in its net worth.

The balance sheet is a still picture revealing the financial condition of the business in respect to its assets, liabilities and net worth at the moment the picture was taken; the statement of income and profit and loss is similar to a series of moving pictures showing in bold relief the changes wrought during the accounting period by virtue of profits or losses.

2. Reasons for Accounting Periods and Financial Statements

While banks and similar institutions have found it desirable and practicable to prepare financial statements daily, we venture to

say that the majority of commercial houses adopt the year as their accounting period, many of them, perhaps, using the month for informal, approximately correct statements for internal use.

Even though the financial condition of a business changes every minute, balance sheets and statements of income and profit and loss must be prepared at regular intervals, otherwise there would be no way of comparing one accounting period with another.

If a child's picture is taken now and then, a series of photographs thus obtained furnishes an interesting graphic presentation of his development. Financial statements serve a similar purpose. A child normally grows larger and larger until it reaches a certain age; a business, on the other hand, may progress, or stand still, or even go down hill, with no time limit set. It is therefore important to picture its condition frequently so that proper measures may be taken in time, if necessary and possible, to protect it against harm, or, in the case of a successful business, to make it still more successful.

3. Causes of Profit or Loss Determinable from Profit and Loss Account

In the first lesson it was pointed out that the *amount* of profit or loss for an accounting period could be determined in a business using the single entry method of bookkeeping, but the *causes* thereof could not be told without practically rewriting the books along double entry lines.

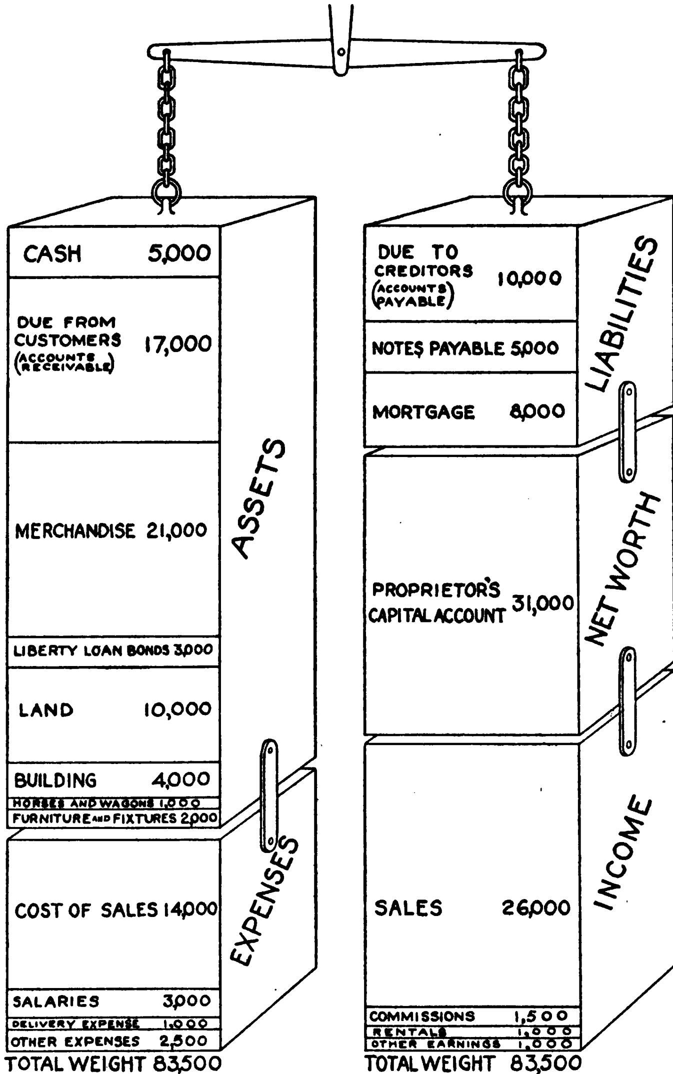
In the second lesson it was stated that the component parts of the net profit or loss for a period, as well as the amount, are determinable from the Profit and Loss account of a double entry set of books. We will now go into this matter in greater detail, and show how the statement of income and profit and loss can be readily prepared from books kept under the double entry system, if the ledger accounts representing nominal elements (earnings and expenses) are properly classified and kept.

4. Nominal Accounts are Temporary Accounts

Go back for a moment to Lesson 10 and the illustration of how the equilibrium of the balance sheet is maintained, and especially to the part that refers to some asset values going out of the business on account of expenses incurred and to other asset values coming in on account of earnings. It was there shown that to preserve the balance a certain amount of value had to be taken from the Net Worth box to offset the asset value lost by reason of an expense. Conversely, to balance any additional asset value that might be brought into the business through profits, an equivalent weight, or value, had to be added to the Net Worth box.

It would be possible, of course, to lift the cover of the Net Worth box and to take out some value every time an expense was incurred, and to lift it again and put in some other value every time a profit was realized. But this would be considerable trouble. Worse than that, the contents of the Net Worth box would be mixed up, and about all you could tell at the end of a certain period would be that the box weighed so much more or less than it did at the beginning of the period. We would have practically the same indictment against this method as we have against single entry, which tells us the amount of the profits or losses, but not the reasons therefor.

Now instead of disturbing the Net Worth box, suppose we leave it absolutely alone for a whole accounting period, and add two boxes to our diagram, as follows, one on the left side in which to place the weight taken from the Assets box on account of expenses incurred, and another on the right side, in which to put weight to counterbalance the additional value put into the Assets box on account of profits realized.


CASH 5,000
DUE FROM CUSTOMERS (ACCOUNTS RECEIVABLE) 17,000
MERCHANDISE 21,000
LIBERTY LOAN BONDS 3,000
LAND 10,000
BUILDING 4,000
HORSES AND WAGONS 1,000
FURNITURE AND FIXTURES 2,000
ASSETS
COST OF SALES 14,000
SALARIES 3,000
DELIVERY EXPENSE 1,000
OTHER EXPENSES 2,500
EXPENSES
TOTAL WEIGHT 83,500
DUE TO CREDITORS (ACCOUNTS PAYABLE) 10,000
NOTES PAYABLE 5,000
MORTGAGE 8,000
LIABILITIES
PROPRIETOR'S CAPITAL ACCOUNT 31,000
NET WORTH
SALES 26,000
COMMISSIONS 1,500
RENTALS 1,000
OTHER EARNINGS 1,000
INCOME
TOTAL WEIGHT 83,500

The first we will call the Expense box and the second the Income box. The Expense box is built to contain every conceivable expense, but like the Assets box it is arranged with compartments to classify the contents. The Income box likewise classifies the earnings.

At the end of the accounting period the two boxes must be removed. How can this be done, if they do not weigh the same? Will that not upset the equilibrium? Not if the difference in weight between the Expense box and the Income box is added to or subtracted from the weight of the Net Worth box. For example, if it were found that the Expense box weighed $2,000 and the Income box $3,000, the equilibrium would not be disturbed if the two boxes were removed and a weight of $1,000 were added to the Net Worth box. In this case a $2,000 weight would be taken from the left side of the scale, but, to counterbalance, a weight of $2,000 would be taken from the Income box, and the balance left in the Income box ($1,000) would be emptied into the Net Worth box.

But if, on the other hand, it were found at the end of an accounting period, that the Expense box weighed $3,000 and the Income box $2,000, the difference, or $1,000, would have to be taken from the Net Worth box to preserve the equilibrium, if both boxes were removed. In this case a $3,000 weight would be taken from the left side of the scale and a corresponding $3,000 from the right—$2,000 of which would come from the Income Box and $1,000 from the Net Worth box.

The foregoing is a homely illustration of the working of the Profit and Loss account of a double entry set of books, and is only another way of saying that the difference between the total expenses and total income of a business, for a given period, is transferred at the end of an accounting period in a sole proprietorship to an account representing Net Worth, called the capital account. If the earnings exceed the expenses, the net profit increases the capital account. If the expenses exceed the earnings, the net loss decreases

the capital account. In a partnership, the net profit or loss is apportioned among the partners. In a corporation, the net profit or loss is carried to Surplus account.

If the proprietor's capital account were debited with every expense as incurred and credited with every profit as realized simply because expenses, as has been told, must come out of his pocket and because profits belong to him, the bookkeeping method would be like taking something from the Net Worth box and putting something back every few minutes. The Capital account would present a very disorderly appearance and would have to be thoroughly analyzed for a given period to determine why its balance was larger or smaller at the end of the period than at the beginning.

To open up one Expense account to which to debit expenses (corresponding with the Expense box) and one Earning account to which to credit earnings (corresponding with the Income box) would be an improvement, but even this would be unsatisfactory. So an account is opened for each classification of expense (corresponding with the compartments in the Expense box) and an account for each classification of earning (corresponding with the compartments in the Income box).

These nominal accounts hold temporarily, that is to say during an accounting period, the debits or credits that would otherwise have to be posted to the proprietor's capital account.

At the end of the period, instead of transferring the balances of the various expense and earning accounts to the debit and credit respectively of the proprietor's capital account, it is customary to transfer them to an account called Profit and Loss. Here the expenses are weighed against the earnings and the difference between the two is carried to the capital account; to its debit if expenses exceed earnings or to its credit if earnings exceed expenses.

In short, the Profit and Loss account serves as a meeting place for expenses and earnings, where they are both totaled and the net result for the accounting period is determined.

5. Capital Account Should Show Profits and Losses Clearly Distinguished from Contributions and Withdrawals.

In the first lesson it was stated that the capital account could be increased in only two ways, namely, by the contribution of additional capital, or the realization of profits, and conversely it could be decreased in only two ways, namely, by the withdrawal of capital or through losses sustained. The balance transferred from Profit and Loss account to Capital account reflects the increase or decrease of capital in the second way mentioned, namely, through profits or losses.

The closing out at the end of an accounting period of all nominal accounts into Profit and Loss account and the closing, in turn, of Profit and Loss account by the transfer of its balance into Capital account, are like removing the Expense and Income boxes from the scales and preserving the equilibrium by an adjustment in weight of the Net Worth box.

The nominal accounts are opened, as stated before, in order to analyze the expenses and earnings. Furthermore, if only the net profit or loss for the period is credited or charged to Capital account, which means only one entry in Capital account representing the profit or loss for a given period, instead of an indefinite number of entries, the capital account does not present a confusing array of figures, but shows clearly the distinction between capital contributions or withdrawals, and increases or decreases in net worth due to profits or losses.

6. Statement of Income and Profit and Loss May Be Prepared from Profit and Loss Account

The statement of income and profit and loss is, to a certain extent, a copy of the Profit and Loss account. At any rate, it includes the same elements as the Profit and Loss account and arrives at the same final balance for the accounting period, although the internal arrangement of the items may vary.

7. Statement of Income and Profit and Loss Classifies Nominal Accounts

As you will see shortly, a definite classification and grouping of nominal accounts is followed in the make-up of a statement of income and profit and loss, just as a definite classification and grouping of real accounts is followed in the preparation of the balance sheet.

8. Statement of Income and Profit and Loss Supplements the Balance Sheet

The balance sheet and the statement of income and profit and loss may be likened unto partners. They are usually found together, the one supplementing the work of the other. The duty of the balance sheet is to set forth the financial condition of the business as of a certain date. The business of the statement of income and profit and loss is to account for that part of the increase or decrease in net worth disclosed by the balance sheet, which has directly resulted from operations during the accounting period.

For example, if the net worth revealed by a balance sheet as of December 31, 1921, amounted to $38,000 as compared with the net worth as of December 31, 1920, of $25,000, and there were no contributions nor withdrawals of capital, the statement of income and profit and loss would supply the detail as to the increase of $13,000. Any contributions or withdrawals of capital would be separately stated on the balance sheet.

The balance sheet confines its attention to the asset and liability and capital accounts of a business; the statement of income and profit and loss deals only with the nominal accounts, which explain the changes in the capital account arising from operations during the period. Between the two all the accounts appearing on a trial balance are taken care of.

9. Three Basic Rules in Connection with Profit and Loss Account

Three important things to remember in connection with the

Profit and Loss account, and consequently in connection with a statement prepared therefrom, are as follows:

(1) That profits should not be anticipated.

(2) That each accounting period should bear its proper proportion of expenses and be given credit for its proper proportion of earnings, regardless of the fact that some of the expenses may not actually be paid in cash and that some of the earnings may not actually be collected until a later period.

(3) That no accounting period should be obliged to stand more than its proper proportion of expenses by virtue of the fact that certain expenses have been prepaid, nor allowed to receive credit for more than its proper proportion of earnings by virtue of the fact that certain collections have been received in advance of services rendered.

The efficient accountant is ever on the lookout to see that these rules are observed.

10. Example of Anticipating Profits

In respect to the first precept, an example of anticipating profit would be the valuing of merchandise inventory at the end of an accounting period at market prices, if market were higher than cost. It has been explained how gross profits from the sale of merchandise are determined under the inventory method by using the value of the merchandise on hand at the end of an accounting period as a factor. The greater the value given to the final inventory, the larger the profits will show. Therefore, if the final inventory is figured at market prices when market is higher than cost, it is done on the assumption that the inventory will be sold at that figure. That is *anticipating* the profit, because the profit can not actually be realized until the merchandise is sold.

11. Accrued and Cash Bases Contrasted.

In respect to the second precept, the matter of accruing expenses and earnings has been touched upon in the discussion of accrued assets and liabilities. When accruals are made, the accounting is said to be on the "accrued basis" as distinguished from the "cash basis". On the cash basis, expense accounts are charged only when cash is paid, and earnings accounts are credited only when cash is received. The latter method, as can be plainly seen, makes the Profit and Loss account dependent more or less upon the whims of cash. If the accounts are kept on a cash basis rather than on an accrued basis, the Profit and Loss account would almost certainly not reflect the true profits or losses of a business for a given period. For example, suppose a business owned some bonds on which interest of $1,000 was collectible December 15, but the coupons were not cashed until January 3. The following December, let us further assume, the coupons were cashed on December 16. In such a case the first year would not receive credit for $1,000 to which it was entitled, whereas the second year would receive credit for $1,000 too much. Taking the two years together, the result would be the same, but the accounting rule would be violated that each accounting period should receive due credit for all that it earned but no more.

The accrued basis is the scientific way. The cash basis is becoming more and more a thing of the past.

12. Why Expenses and Earnings are Deferred

In respect to the third precept, the method of deferring expenses and earnings is provided as protection against over-charging or over-crediting the Profit and Loss account of any period on account of pre-payments or collections in advance.

13. Each Accounting Period Must Stand Alone

It is, of course, important that each accounting period be made to stand on its own legs. If this is not done, no true comparison

can be made of one accounting period with another. And comparisons, as can be readily understood, are essential to everyone charged with business control. Comparisons act as a compass.

14. Payments, Expenditures and Expenses

Before proceeding with a detailed discussion of the profit and loss account and the statement of income and profit and loss, the meaning of the words "payments", "expenditures" and "expenses", as used in accounting, should be understood. "Payment" refers to a cash disbursement, as contrasted with "expenditure", which may mean a payment or an obligation incurred to be paid. Therefore, the word expenditure is more inclusive than the word payment. If you buy some merchandise on credit you make an "expenditure" for merchandise. Expenditure is further distinguished from the word expense. An expenditure may be for the acquisition of an asset, the reduction of a liability or on account of the incurring of an expense. The word expense is, however, limited in meaning to an expenditure that represents the cost of doing business.

QUESTIONS

Lesson 19

1. On what basic rule of accounting is the theory of accruals founded?

2. Give one example of each of the following:

   (a) An expenditure that is not a payment.
   (b) A payment that is not an expenditure.
   (c) A payment that is not an expense.
   (d) An expense that is not a payment.

3. Distinguish clearly between expenditure and payment and between expenditure and expense.

4. On what basic rule of accounting is the theory founded that merchandise inventory should be valued in a balance sheet at cost, and not at market price when the market price is higher than cost?

5. On what basic rule of accounting is the theory of deferred charges and deferred credits founded?

6. In what respect is a statement of income and profit and loss like a balance sheet?

7. Can a real account be an impersonal account, and can a personal account be a real account? Give reasons for your answer and examples.

8. In the first lesson it was stated that net worth could be increased through additional contributions of capital or through profits, and conversely that it could be decreased through withdrawals or through losses. How are these four factors kept separate in a sole proprietor's capital account?

9. What is an accounting period, and what is the reason for having accounting periods?

10. Distinguish clearly between a balance sheet and a statement of income and profit and loss.

11. Discuss fully the theory of nominal accounts.

12. Can a nominal account be a personal account? Give reasons for your answer.

LESSON 20

STATEMENT OF INCOME AND PROFIT AND LOSS CLOSING THE BOOKS

1. Preliminary Steps

Before the work of preparing formal financial reports, such as the balance sheet or the statement of income and profit and loss, is begun, the books should be "closed" and the ledger proved to be in balance after the closing entries have been posted.

When one speaks of closing the books he has ordinarily in mind two things:

(1) The process of adjusting the accounts so as to reflect the true state of affairs in respect to the assets and liabilities of the business at a given date, as well as to the earnings and expenses for a given period.

(2) The bookkeeping routine of transferring the balances of all nominal accounts to Profit and Loss account, and the balance of that account to the appropriate account or accounts, depending upon the form of organization.

The first step, the adjustment of the accounts, includes such things as determining the value of merchandise inventory on hand at the end of the accounting period and the setting up of accruals, deferred charges and credits, and the like. Some concerns figure accruals and deferred charges and credits monthly, so that that part of the work is not out of the ordinary at the end of the accounting period. Others (especially those which do not prepare monthly statements of income) wait until the closing time to do all these things.

In your practical work you have had some experience in adjusting accounts to the accrued basis. For example, on the books

of Phil Ryan you charged the first payments of insurance to Insurance account. As at October 1, 1920, you made an "adjustment" of this account by figuring the proportion of the insurance that had been paid beyond September 30, which amount you credited to Insurance account (an expense account) and debited to Unexpired Insurance account (an asset account). Thereafter you made monthly "adjustments" of Unexpired Insurance account, by transferring to Insurance account the month's proportion of insurance cost. You made similar "adjustments" of Interest Earned account and Accrued Interest Receivable, of Interest Expense account and Accrued Interest Payable.

Ordinarily at the close of an accounting period, say at June 30 or December 31, the bookkeeper will hold the books open for a certain length of time (sometimes as long as he possibly can) until an inventory of merchandise can be taken and all necessary adjustments of accounts made. That is to say, he may not be able to close his ledger finally until some time after June 30 or December 31. But in the meantime the recording of the current work for the next accounting period will go on uninterrupted, at least as far as the books of original entry are concerned.

As you have had some practical experience in adjusting accounts, we will not, for the present, go into further detail in respect to step one, but will wait until you have covered more ground in the course. We will devote our attention at this point rather to step two.

2. Before-Closing Trial Balance

For this purpose let us take the following trial balance of Samuel Brown, a sole proprietor engaged in trading, and assume that he closes his books twice a year, at June 30 and December 31.

SAMUEL BROWN

TRIAL BALANCE, DECEMBER 31, 1921

Section 1	*Debits*	*Credits*
Cash	$ 8,000	
Notes Receivable	15,000	
Notes Receivable Discounted		$ 1,000
Merchandise Inventory	82,000	
Accrued Interest Receivable	106	
U. S. Government Bonds	20,000	
Furniture and Fixtures	3,000	
Delivery Equipment	8,000	
Notes Payable		3,000
Vouchers Payable		22,000
Accrued Rent Payable		833
Accrued Interest Payable		30
Accrued Salaries		3,000
Samuel Brown, Capital Account		45,472
Section 2		
Sales		247,900
Interest Earned		425
Cash Discounts Received		1,060
Profit and Loss on Sale of Capital Assets		1,241
Cost of Goods Sold	130,200	
Salesmen's Salaries	14,000	
Commissions	6,240	
Advertising	2,841	
Miscellaneous Selling Expense	439	
Office Salaries	25,040	
Rent	5,000	
Stationery, Printing and Postage	300	
Telephone and Telegraph	50	
General Expense	325	

Interest Expense	100	
Uncollectible Accounts	460	
Fire Loss	4,630	
Income Tax Adjustment	230	
Total	$325,961	$325,961

3. Closing Journal Entries

Further assuming that the foregoing trial balance represents the accounts after step one has been taken, let us proceed with step two.

The first thing to do would be to prepare closing journal entries as follows:

Profit and Loss	$189,855	
Cost of Goods Sold		$130,200
Salesmen's Salaries		14,000
Commissions		6,240
Advertising		2,841
Miscellaneous Selling Expense		439
Office Salaries		25,040
Rent		5,000
Stationery, Printing and Postage		300
Telephone and Telegraph		50
General Expense		325
Interest Expense		100
Uncollectible Accounts		460
Fire Loss		4,630
Income Tax Adjustment		230

To close out the expense accounts into Profit and Loss account at the end of the accounting period of six months ended December 31, 1921.

Sales	247,900	
Interest Earned	425	
Cash Discounts Received..........................	1,060	
Profit and Loss on Sale of Capital Assets..	1,241	
Profit and Loss......................................		250,626

To close out the earning accounts into Profit and Loss account at the end of the accounting period of six months ended December 31, 1921.

Profit and Loss..	60,771	
Samuel Brown, Capital account............		60,771

To transfer net profit for the six months ended December 31, 1921, to Samuel Brown's Capital account.

4. Profit and Loss and Capital Accounts After Closing the Books

After these three journal entries had been posted, the Profit and Loss account and Samuel Brown's Capital account would appear as follows, assuming that Samuel Brown had neither contributed nor withdrawn any capital during the six months.

PROFIT AND LOSS ACCOUNT

Date	*Particulars*	*Ref.*	*Amt.*	*Date*	*Particulars*	*Ref.*	*Amt.*
1921				1921			
Dec. 31	Sundry Expenses	J.33..	189,855	Dec. 31	Sundry Earnings	J.34..	250,626
" "	Balance to Capital account	J.34..	60,771				
			250,626				250,626

SAMUEL BROWN, CAPITAL ACCOUNT

Date	Particulars	Ref.	Amt.	Date	Particulars	Ref.	Amt.
1921				1921			
Dec. 31	Balance down		106,243	July 1	Balance		45,472
				Dec. 31	Net Profit for 6 months	J.34	60,771
			106,243				106,243
				1922			
				Jan. 1	Balance		106,243

If Samuel Brown had contributed and withdrawn capital during the six months his account might appear as follows:

SAMUEL BROWN, CAPITAL ACCOUNT

Date	Particulars	Ref.	Amt.	Date	Particulars	Ref.	Amt.
1921				1921			
Oct. 5	Cash	CR.61	30,000	July 1	Balance		45,472
Dec. 31	Balance down		86,243	Aug. 16	Cash	CR.80	10,000
				Dec. 31	Net Profit for 6 months	J.34	60,771
			116,243				116,243
				1922			
				Jan. 1	Balance		86,243

A glance at Samuel Brown's Capital account (the one showing a contribution and a withdrawal of capital) would show that the increase of $40,771 in his capital account during the six months was due to the following causes:

Net Profit	$60,771
Less Net Withdrawals	20,000
	$40,771

This fact could not be so readily determined if the capital account were charged with expenses as incurred and credited with amounts earned.

5. Showing Detail in the Profit and Loss Account

The Profit and Loss account, as just presented, shows the total expenses and the total earnings, but if anyone wished to know the detail of those totals he would have to refer to the journal folios whence the postings came. In order to have the detail in the ledger account itself (and thus obviate, in many cases, a search for other books) a bookkeeper in posting may "spread out" the detail in the Profit and Loss account by practically copying the journal entries. He may even go back of the journal entries for still further detail to certain of the ledger accounts closed into Profit and Loss, for it must be remembered that the journal entry usually transfers only the *balance* of nominal accounts.

The plan of showing comprehensive detail in the Profit and Loss account itself is, in our opinion, to be commended, as the desired information as to profits and losses over a number of accounting periods can thus be found conveniently in one definite place.

In cases where it is not desirable to show too much information of a more or less confidential nature in the general journal or general ledger, both the closing entries and the Profit and Loss account can be carried in "private" books.

Assuming that Samuel Brown insisted upon detail being shown in the Profit and Loss account, his Profit and Loss account might appear as follows:

PROFIT AND LOSS ACCOUNT

Returned Sales		2,100	Sales		250,000
Cost of Goods Sold			Interest Earned		425
Inventory, July 1	50,000		Cash Discounts		
Purchases	145,000		Received		1,060
Inward Freight and			Profit and Loss on Sale		
Cartage	2,900		of Capital Assets		
	———		Real Estate	1,025	
	197,900		Securities	216	
Inventory, Dec. 31	67,700			———	
	———				1,241
		130,200			

Salesmen's Salaries	14,000		
Commissions	6,240		
Advertising	2,841		
Miscellaneous Selling Expense	439		
Office Salaries	25,040		
Rent	5,000		
Stationery, Printing and Postage	300		
Telephone and Telegraph	50		
General Expense.............	325		
Interest Expense	100		
Uncollectible Accounts....	460		
Fire Loss........................	4,630		
Income Tax Adjustment	230		
Balance Transferred to Samuel Brown's Capital Account	60,771		
	252,726		252,726

The foregoing itemized Profit and Loss account is practically a copy of the three closing journal entries preceding it, with the debits detailed on one side and the credits on the other. The excess of credits over debits is shown as "Balance Transferred to Samuel Brown's Capital Account", this entry closing the Profit and Loss account. Three exceptions, however, must be noted.

The journal entries show a single amount for sales of $247,900, a single amount for cost of goods sold of $130,200, and a single amount for profit and loss on sale of capital assets of $1,241. The bookkeeper in posting these amounts to the ledger showed an "analysis" of each, which he obtained by an examination of the entries in the ledger account of each respectively. Instead of posting $247,900 to the credit of Profit and Loss account as the balance of Sales account, he posted

Gross Sales (to the credit)...............................	$250,000
Returned Sales (to the debit)........................	2,100
	$247,900

When he came to the Cost of Goods Sold item he made what amounts to a transcript of the Cost of Goods Sold account.

When he came to the Profit and Loss on Sale of Capital Assets account he listed the different capital assets sold and the profit on each. All of this was done for the purpose of making it easy to prepare a statement of income and profit and loss direct from the Profit and Loss account, as you will see in the next lesson.

6. After-Closing Trial Balance

After the three closing journal entries mentioned in section 3 had been posted, a trial balance of Samuel Brown's general ledger would appear as follows. This would be referred to as an "after-closing" trial balance.

	Debit	Credit
Cash	$ 8,000	
Notes Receivable	15,000	
Notes Receivable Discounted		$ 1,000
Merchandise Inventory	82,000	
Accrued Interest Receivable	106	
U. S. Government Bonds	20,000	
Furniture and Fixtures	3,000	
Delivery Equipment	8,000	
Notes Payable		3,000
Vouchers Payable		22,000
Accrued Rent Payable		833
Accrued Interest Payable		30
Accrued Salaries		3,000
Samuel Brown's Capital Account		106,243
Total	$136,106	$136,106

From this trial balance the earning and expense accounts are conspicuously absent.

7. Accounts Should be Systematically Arranged in a Ledger

From the accounts as arranged on the "before-closing" trial balance, we could have arrived quickly at the net result for the six months, before posting any closing journal entries, by adding the difference between the credits and debits of the accounts in Section 2 to the balance of Samuel Brown's capital account, thus:

Section 1	$136,106	$ 75,335
Section 2	189,855	250,626
	$325,961	$325,961
Samuel Brown's Capital account per "before-closing" trial balance		$ 45,472
Add excess of credits over debits per Section 2		60,771
Samuel Brown's Capital account per "after-closing" trial balance		$106,243

From the foregoing it may be readily seen how a systematic arrangement of accounts in a ledger facilitates the making up of financial reports direct from trial balances. This plan is especially adaptable to monthly reports. As has been stated before, it is becoming more and more the custom for business houses to prepare balance sheets and statements of income and profit and loss monthly, at least for internal use. The times demand that executives review as frequently as possible the conditions of the business of which they are in charge, and yet it would be awkward to close the nominal accounts into Profit and Loss account more often than once or twice a year. This would have to be done, however, if the only way an accountant could prepare a statement of income and profit and loss were by reference to the Profit and Loss account. A short cut method is therefore worked out by arranging

the accounts in the ledger in the following order: assets, liabilities, capital, earnings, and expenses (whatever may be the most convenient internal arrangement of each main group in particular cases).

Provided the asset and liability accounts are arranged in the ledger in the order in which they are listed on the balance sheet, and the earning and expense accounts in the order in which they appear on the statement of income and profit and loss, and further provided that the balance sheet and statement of income and profit and loss are printed forms (as is becoming more and more the case), the making up of the reports is little more than taking the amounts that appear on the trial balance and copying them in one, two, three order on the financial statements in the space provided. Let us use a trial balance with a few accounts (an incomplete list) to illustrate:

TRIAL BALANCE

		Debits	Credits
1.	Cash	$ 150	
2.	Accounts Receivable	1,860	
3.	Inventory	2,340	
4.	Notes Payable		$ 800
5.	Accounts Payable		1,460
6.	Capital		1,495
7.	Sales		6,000
8.	Cost of Goods Sold	4,800	
9.	Salesmen's Commissions	100	
10.	Office Salaries	475	
11.	Interest Expense	30	
	Total	$9,755	$9,755

BALANCE SHEET

	Assets				Liabilities		
1.	Cash	$ 150		4.	Notes Payable		$ 800
2.	Accounts Receivable	1,860		5.	Accounts Payable		1,460
3.	Inventory	2,340		6.	Capital:		
					Beginning of period	$1,495	
					Net Income for period, per Statement of Income	595	2,090
	Total	$4,350			Total		$4,350

STATEMENT OF INCOME

7.	Sales		$6,000
8.	Cost of Goods Sold		4,800
	Gross Trading Profit		$1,200
	Selling and General Expenses:		
9.	Salesmen's Commissions	$ 100	
10.	Office Salaries	475	
	Total Selling and General Expenses		575
	Net Trading Profit		$ 625
11.	Income Charge—Interest Expense		30
	Net Income		$ 595

Notice how the statement of income supplements the balance sheet. The net income of $595 appearing on the statement of income is used on the balance sheet as an addition to the capital at the beginning of the period, to arrive at the capital at the end of the period. In this instance, there were no contributions nor

withdrawals of capital during the period. If there had been, they would have been shown separately on the balance sheet as further additions to, or as deductions from, the capital at the beginning of the period.

QUESTIONS

Lesson 20

1. If you were called upon as an accountant to "close the books" of a sole proprietor at the end of an accounting period, say June 30, state in a general way what you would do, and the order in which you would proceed with your work, assuming that you had to do everything personally. For the purpose of this question it will be further assumed that you would not be held responsible for any knowledge of accounting beyond what has been outlined in the first twenty lessons of this course.

2. Do you think that in closing nominal accounts into Profit and Loss account it is sufficient to transfer only the balances of the nominal accounts to Profit and Loss account? Give reasons for your answer.

3. Given the following accounts, list them in the order in which you would arrange them in the general ledger. For this purpose you need not consider the internal arrangement of any one group of accounts. Give reasons for your arrangement.

(1) Discount Earned, (2) Delivery Equipment, (3) Vouchers Payable, (4) Interest Earned, (5) Bills Payable, (6) Merchandise Inventory, (7) Cash, (8) Customers' Accounts, (9) Salaries, (10) Heat, Light and Power, (11) Office Supplies, (12) Telephone and Telegraph, (13) Mortgage Payable, (14) Discount Allowed, (15) Land and Buildings, (16) Accrued Rent Payable, (17) Accrued Rent Receivable, (18) Proprietor's Capital, (19) Prepaid Insurance, (20) Employees' Deposits for Locker Keys, (21) Accrued Wages, (22) Notes Receivable, (23) Liberty Loan Bonds, (24) Sales, (25) Cost of Goods Sold.

LESSON 21

STATEMENT OF INCOME AND PROFIT AND LOSS FORM AND CONTENTS

1. Introductory

This and the next two lessons will treat of the statement of income and profit and loss of trading and manufacturing concerns. Practically the only difference between a trader and a manufacturer is that the former buys what he sells while the latter manufactures his product, but this, of course, means that the manufacturer incurs certain expenses that the trader does not. Consequently a statement of income and profit and loss for a manufacturer would differ from one prepared from the books of a trader, to a certain extent, because the classification of expense accounts would not be the same.

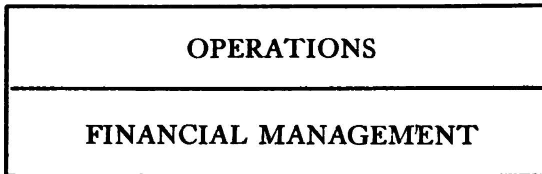
As considerable capital is necessary to carry on manufacturing activities extensively, and as business enterprises requiring a large amount of capital usually organize under the corporate form, it is easy to think that manufacturing is done exclusively by corporations. It is perfectly possible, however, for a sole proprietor to engage in the manufacturing business, and, until it is time to introduce partnership and corporation accounting, our illustrated balance sheets and statements of income and profit and loss will consider only the sole proprietor and a single capital account representing his net worth.

Even if it were not possible for a sole proprietor to engage in manufacturing, we would feel at liberty to imagine that he could, for the purpose of illustrating certain points without being obliged to include other ideas that might, at this time, be confusing.

After the theory of certain representative accounts and the preparation of financial statements in their simplest forms have been taught, it will be time enough to go into the problems peculiar to partnerships and corporations.

2. Statement Divided Broadly into Two Parts

Whether the object of the business is to manufacture or merely to trade, the statement of income and profit and loss may be broadly divided into two parts. The first part reports the results of operations; the remainder of the statement is devoted to other items of income, expense, or loss not directly connected with operating the business, but rather with financing it, except as hereinafter noted. In other words, a business may be broadly divided into two distinct activities, represented graphically as follows:



The statement of income and profit and loss must portray the results of each activity separately and of both combined. The nominal accounts are therefore presented on the statement of income and profit and loss in groups to accomplish this purpose.

In the first main section are shown the sales, the cost of sales, and the difference or gross profit, from which are deducted the selling and general administrative expenses to arrive at the profit or loss from operations.

In the second main group are included such items as interest earned, interest expense and other profits and losses.

If the general ledger is in balance, there is nothing particularly difficult about the preparation of either a statement of income and profit and loss, or a balance sheet, outside of perhaps deciding in what group certain accounts belong, not all accountants being of the same mind as to how certain items should be classified. For instance, one of the points much debated is whether taxes and insurance covering a factory should be considered a part of manufac-

turing cost (in which event they would be included in the group of operating accounts) or whether they should be considered as premium paid for the protection of the capital investment (in which event they would be included in the group of financial management accounts).

3. The Reason for the Division into Two Parts

The head of the business and others are, of course, interested in all phases of the business, but they are especially anxious about the net profit or loss resulting from operations. Hence the jealous care with which the accounts reflecting operating income and expense are supposed to be kept separate from the others.

4. The Running Form of Statement

The statement of income and profit and loss may be prepared in what is known as the "running" form or the "account" form, although the latter appears to be falling into disuse, presumably because the former is generally better understood by business men.

Turn back to the itemized Profit and Loss account of Samuel Brown shown on pages 7 and 8 of the previous lesson, and we will show you how a statement of income and profit and loss may be readily prepared therefrom. All the essential details are there for a statement to be used for ordinary purposes. Even the final result is shown. It therefore becomes only a matter of setting up the items in statement form in an intelligent way. In other words the problem is reduced to one of classification and arrangement of amounts. But this problem, simple as it may seem, often requires accounting knowledge and skill of a high order.

We will illustrate first the running form of statement as follows, using the same amounts as appear in the Profit and Loss account just mentioned:

SAMUEL BROWN

STATEMENT OF INCOME AND PROFIT AND LOSS

FOR THE SIX MONTHS ENDED DECEMBER 31, 1921

Gross Sales		$250,000
Returns and Allowances		2,100
Net Sales		$247,900
Cost of Goods Sold:		
Merchandise Inventory, July 1, 1921	$ 50,000	
Purchases	145,000	
Inward Freight and Cartage	2,900	
	$197,900	
Less Merchandise Inventory, Dec. 31, 1921	67,700	
Total Cost of Goods Sold		130,200
Gross Trading Profit		$117,700
Selling Expenses:		
Salesmen's Salaries	$ 14,000	
Commissions	6,240	
Advertising	2,841	
Miscellaneous	439	
Total Selling Expenses	$ 23,520	
General Expenses:		
Office Salaries	$ 25,040	
Rent	5,000	
Stationery, Printing and Postage	300	
Telephone and Telegraph	50	

Miscellaneous	325	
Total General Expenses	$ 30,715	
Total Selling and General Expenses		$ 54,235
Net Trading Profit		$63,465
Income Credits:		
Interest Earned	$ 425	
Cash Discounts Received	1,060	
Total Income Credits		1,485
Gross Income		$64,950
Income Charges:		
Interest Expense	$ 100	
Uncollectible Accounts	460	
Total Income Charges		560
Net Income		$64,390
Profit and Loss Credits:		
Profit on Sale of Real Estate	$ 1,025	
Profit on Sale of Securities	216	
Total Profit and Loss Credits		1,241
Gross Addition to Capital Account		$65,631
Profit and Loss Charges:		
Fire Loss	$ 4,630	
Income Tax Adjustment Applicable to the Year 1920	230	
Total Profit and Loss Charges		4,860
Net Addition to Capital Account		$60,771

In connection with the foregoing statement observe the following points:

(1) That it is for a period, namely, "for the six months ended December 31, 1921".

(2) That the "running" form is so called because the sections are arranged one below the other, and deductions and additions are made accordingly.

(3) That double lines are drawn under the final figures.

(4) That the Cost of Goods Sold section is practically a transcript of the Cost of Goods Sold account kept by the method described as the "alternative method" in Lesson 14.

The running form of statement for a trader or a manufacturer may be compared with a factory building in which a separate floor is assigned to each departmental activity. Value enters the building at the top and is passed down from floor to floor in successive stages until it reaches the basement, from which it is removed to be put into a private warehouse for the owner or owners.

On the top floor gross profit is ordinarily made, although sometimes even this department may show a loss. The value coming into the business is enhanced by passing through the first department, unless, as is rather unusual, the merchandise is sold for less than cost.

When the value reaches the next floor it is diminished by the Selling and General Expenses.

The third department sets to work to increase the value again by the amount of Income Credits and the fourth to decrease it by the amount of Income Charges.

Perhaps the value has to pass through two more departments before it reaches its "finished" state, the first of which would

increase it by unusual or extraordinary profits or by profits realized during the period that really belonged to a prior period. The second would decrease it by unusual or extraordinary losses or by losses sustained during the period that really belonged to the prior period. By that time the value, in its altered form, would be ready to be wheeled to the warehouse.

The foregoing of course presupposes a final profit for the period. If, on the other hand, the final result were a loss, value would have to be taken from the warehouse to make good the deficit, if possible.

In a sole proprietorship, the warehouse is the capital account of the proprietor, who has the sole right to withdraw value from the warehouse for private use.

In a partnership the warehouse is the combined capital accounts of the different partners, who have a right to withdraw value for private use in equal or unequal amounts according to circumstances to be explained in the lessons on Partnership Accounting. In a corporation the warehouse is Surplus account.

5. The Account Form of Statement

Following is an illustration of the "account" form of statement, using the same amounts as appeared in the "running" form:

SAMUEL BROWN

STATEMENT OF TRADING, INCOME AND PROFIT AND LOSS
FOR THE SIX MONTHS ENDED DECEMBER 31, 1921

TRADING ACCOUNT

Merchandise Inventory, July 1	50,000	Gross Sales	250,000
Purchases	145,000	Merchandise Inventory December 31	67,700
Inward Freight and Cartage	2,900		
Returns and Allowances	2,100		
Balance, Gross Trading Profit	117,700		
	317,700		317,700
		Gross Trading Profit	117,700

Salesmen's Salaries	14,000		
Commissions	6,240		
Advertising	2,841		
Miscellaneous Selling Expenses	439		
Balance, Selling Profit	94,180		
	117,700		117,700
		Selling Profit	94,180
Office Salaries	25,040		
Rent	5,000		
Stationery, Printing, Postage	300		
Telephone and Telegraph	50		
Miscellaneous General Expenses	325		
Balance, Net Trading Profit	63,465		
	94,180		94,180

INCOME ACCOUNT

Interest Expense	100	Net Trading Profit	63,465
Uncollectible Accounts	460	Interest Earned	425
Balance Transferred to Profit and Loss	64,390	Cash Discounts Received	1,060
	64,950		64,950

PROFIT AND LOSS ACCOUNT

Fire Loss	4,630	Net Income	64,390
Income Tax Adjustment	230	Profit on Sale of Real Estate	1,025
Balance Transferred to Capital Account	60,771	Profit on Sale of Securities	216
	65,631		65,631

The fact that the statement is divided into three parts, one under a center caption "Trading Account", another under the caption of "Income Account" and the third under a center caption "Profit and Loss Account" does not necessarily mean that you may expect to find an account called Trading account, and an account called "Income" account, in addition to one called Profit and Loss in the ledger, although some concerns do open a Trading account as an intermediate closing account, crediting it with Sales and charging it with Cost of Goods Sold and then transferring the balance or gross profit (or loss) to Profit and Loss account.

In the case of a manufacturer the statement would usually begin with a Manufacturing account somewhat as follows (only in greater detail) showing the cost of manufacture. This cost would then be carried to the Trading account to take the place of "purchases" shown in the foregoing illustration of an account form of statement.

MANUFACTURING ACCOUNT

Direct Labor	20,000	Balance to Trading Acct.	56,000
Materials Used	14,000		
Factory Expense	17,000		
	51,000		
Add Decrease in Inventory of Work in Process	5,000		
	56,000		56,000

This statement will be better understood after you have studied Lesson 23.

Referring to the illustration of the account form, it will be noticed that the total of selling expenses is deducted from Gross Trading Profit, and the difference is shown as Selling Profit, whereas in the running form the total of selling and general expenses combined is deducted from Gross Trading Profit. This was done merely to call attention to the fact that you may expect to find variety to a certain extent in the preparation of reports by different accountants.

There are differences in opinion as to how many sections there should be to the Trading and Profit and Loss statement in account form and what names should be given to the balances brought down from one section to the next, points which we will not discuss in detail, especially as the account form of statement appears to be falling into disuse.

6. Statements Should be Illuminating

In preparing any financial statement, the purpose of setting forth in an illuminating manner the principal and important facts in which anyone might be interested must not be overlooked in an endeavor to stick to a formula.

QUESTIONS

Lesson 21

1. Into what two classifications may the activities of any business be broadly divided? Explain how the statement of income and profit and loss gives effect to this division into two general parts and state why, in your opinion, this is done.

2. Set up a "running form" of statement of income and profit and loss for a sole proprietor, showing the main sections. Use any figures you wish for the illustration, but show only totals of each section and the results of adding or deducting one section to or from another. Do not itemize any accounts under any one section head. This question is designed merely to test your knowledge of the names used for the various main sections of a statement of income and profit and loss and of the names used for the result of adding the total of one section to the balance of the preceding section, or of subtracting the total of one section from the balance of the preceding section, as the case might be.

3. Distinguish between a running form of statement of income and profit and loss and an account form.

4. In your opinion is the "account" form of statement of income and profit and loss any more difficult to understand than the "running" form? If so, why? If not, what objections, if any, would you have personally to the account form?

5. Thomas Babcock, as a sole proprietor, started business on July 1, 1918, and not knowing a great deal about higher accounting kept his business strictly on a cash basis. It was his custom also to close out all expense and earning accounts directly to his capital account semi-annually at December 31 and June 30.

He decided that he would like to have an accountant change the accounting system to the accrued basis as at August 31, 1921, and to submit to him an "after-closing" trial balance as of that date, after the books had been put on the new basis. Mr. Babcock also wanted a revolving fund of $100 started on September 1, 1921.

Assume that you were called upon to do this work, commencing on the morning of September 1, 1921; but that you were not expected to make an audit of the accounts.

You were supplied with the following trial balance prepared from the books as they were kept by Mr. Babcock.

BEFORE-CLOSING TRIAL BALANCE

AUGUST 31, 1921

Cash	$ 9,778.21	
Customers' Accounts	12,822.60	
Notes Receivable	346.20	
Merchandise Inventory	6,611.47	
Second Liberty Loan Bonds	2,000.00	
Furniture and Fixtures	3,000.00	
Delivery Equipment	1,510.00	
Accounts Payable		$ 8,320.16
Notes Payable		5,000.00
Bank Loan		2,000.00
Thos. Babcock, Capital		17,136.00
Merchandise Purchases	8,210.09	
Returns and Allowances	100.90	
Salaries	1,125.00	
Rent	1,500.00	
Insurance	66.00	
Office Supplies	151.75	
Stationery and Postage	120.00	
Printing	165.43	
Telephone	30.00	

Delivery Expense	250.17	
Miscellaneous Office Expense	140.65	
Discounts Allowed	27.94	
Sales		15,380.10
Discounts Earned		120.15
Total	$47,956.41	$47,956.41

In addition to this trial balance, you found that the value of merchandise on hand at August 31 amounted to $2,510.26. You also learned that Mr. Babcock had always paid his rent quarterly in advance, February 1, May 1, August 1, and November 1.

All of the check and currency disbursements had been recorded in one cash book, and details of the deposits and checks had been kept on the stub of the check book.

Mr. Babcock had two bank accounts,—one in New York where his office was located, and one in Chicago where, for personal reasons, he kept considerable cash on deposit subject to check and available in cases of need.

The bank in New York reported a credit balance in Mr. Babcock's account at August 31, of $1,222.16. You found in reconciling the New York bank account that checks were outstanding at August 31 amounting to $2,210.05.

The bank in Chicago reported a credit balance in Mr. Babcock's account at August 31, of $10,500.00. Mr. Babcock drew a check for $3,000.00 on the Chicago bank and deposited it in the New York bank on August 31, for which he received credit from the New York bank on September 5. You found in reconciling the Chicago bank account that this check for $3,000.00 was the only one outstanding.

On the morning of September 1, you counted the cash on hand at the close of business at August 31, and found $243.60 in actual

cash, besides slips aggregating $22.50, representing petty disbursements for miscellaneous office expenses of August 30 and 31, which the bookkeeper had not yet entered on the cash book.

Mr. Babcock had been in the habit of discounting from time to time with his New York bank customers' notes and always crediting the net proceeds thereof to Notes Receivable account. Mr. Babcock would not accept a note for longer than three months and whatever notes were discounted, he discounted on the date of the notes. None of the notes mentioned interest, but the bank deducted discount at the rate of 6% per annum in every case. An examination of the records showed the following data relative to notes discounted from June 1 to August 31:

Number of Note	Date of Discount	Amount of Note	Net Proceeds
610	June 1	$1,000.00	$ 995.00
611	June 15	2,000.00	1,970.00
612	July 18	500.00	495.00
613	July 26	496.10	491.14
614	Aug. 8	322.60	320.99

Mr. Babcock had two insurance policies. One was dated July 1, 1919, and covered a period of three years. The premium on this policy, amounting to $400, was paid on July 8, 1919. The second policy was dated Aug. 1, 1921, and covered a period of two years. The premium, amounting to $66, was paid on Aug. 3, 1921.

Mr. Babcock's weekly salary payroll amounted to $125 and covered the week ending Friday night. The last day of August, 1921, came on Wednesday. Consider the payroll on a six days a week basis, that is to say with Sunday excluded.

With such facts as have been stated, submit the adjusting and closing journal entries as of August 31, 1921, and an "after-

closing" trial balance of Thomas Babcock at August 31, 1921. Besides numbering the journal entries from one up and giving the usual concise explanations, state *fully* after each journal entry the reasons why you made it. Also tell how you would start the Revolving Fund and what accounts you would charge and credit.

6. Reconcile the New York and Chicago bank accounts of Thomas Babcock at August 31, 1921, with the cash account in the ledger, all mentioned in the previous question.

LESSON 22

STATEMENT OF INCOME AND PROFIT AND LOSS FORM AND CONTENTS (Continued)

1. Introductory

Referring to the running form of statement of Samuel Brown, shown in the preceding lesson as an illustration, let us analyze a statement of income and profit and loss from the point of view of what accounts are included in each section.

2. Gross Sales, Returns and Allowances

In the first section the returns and allowances are deducted from the gross sales and the remainder is called net sales.

Gross sales represent the aggregate of billings, or invoices, charged to customers' accounts, plus cash sales.

Returns is the name given to the amounts allowed customers for the return of merchandise, while allowances refer more particularly to amounts allowed that are not contingent upon returns.

One concern may have a separate account for returns and a separate account for allowances or one account for both, or returns and allowances may even be charged direct to Sales account, although the last mentioned way is not particularly recommended if the number of returns and allowances is considerable.

Before going further, let us consider at some length the reason for returns and allowances.

Suppose a manufacturer or trader is selling more than one quality of a given product. A customer may order the best material, but, owing to an error in the office routine, he may receive merchandise of an inferior grade. Notwithstanding that fact, he may be billed in accordance with his order. The situation, consequently, calls for an adjustment. The customer may decide to

return the merchandise to be exchanged for what he ordered, or he may accept what he received, provided the vendor makes the price right.

Sometimes, in such an instance, the seller will consider it cheaper to let the buyer have the merchandise at less than the regular selling price than to pay the transportation charges both ways. If the merchandise is exchanged, no ledger account entry may be necessary, as the transaction merely involves the correction of a shipping error. If an allowance is made, however, the customer's account must be credited, and the question then is, what account should be charged? Obviously Sales account should not be allowed to receive full credit for the original invoice. Therefore it might appear that Sales account should be charged, and so theoretically it should be, but if instead, an account called "Returns and Allowances" is charged, that account will automatically register the amount of returns and allowances which the business experiences during a given period. Then at the end of an accounting period, Returns and Allowances account may be closed into Sales account so that the balance of the latter account may reflect the net, or true, sales.

Regardless of the way the ledger accounts are kept, the amount of returns and allowances should be shown separately on the statement of income, because it is important to know the ratio of returns and allowances to gross sales. If the ratio is not normal, something may be radically wrong, possibly in the quality of the goods sold, or there may even be fraud in charging Returns and Allowances account to cover up some irregularity in connection with customers' accounts. For example, suppose a bookkeeper or cashier were successful in appropriating for his own use a remittance from a customer. He might try to conceal the defalcation by crediting the customer through a journal entry for the amount of the remittance, charging Returns and Allowances account to give the entry plausibility.

In any case an abnormally large figure for returns and allowances would warrant investigation into the causes.

We have mentioned an example of an allowance on account of the shipment of the wrong order.

Other allowances may be made on account of:

(a) Errors in billings, or invoices.
(b) The return of defective material.
(c) Freight paid by customer.
(d) Customer's prompt remittance.
(e) Volume of purchases by an individual buyer during a given period.

Case (a) refers to an overcharge or undercharge to a customer resulting from a mistake in invoicing, with a corresponding over or under credit to Sales account. Consequently the credit or charge to customer's account for the adjustment should be charged or credited to Sales account. There can be no argument about that.

In connection with case (b), the return may be complete or partial, but the amount allowed the customer should be charged to Returns or Returns and Allowances, or it may even be charged to Sales account.

If the return is applicable to a sale of a prior accounting period, the amount of the cancelled sale may be charged to an account called "Returns Applicable to Sales of Prior Period" or whatever other name may be chosen, if it is desired to keep such returns separate in order not to charge them against the sales of the current period. In the meantime the vendor may have some defective merchandise on his hands, which must ordinarily be either perfected or disposed of as scrap. How the loss due to the depreciated value of defective material should be handled is treated later in the lesson.

Case (c) covers those cases where the vendor ships merchandise freight "collect" instead of "prepaid" but tells the customer that he may, in remitting, deduct from the amount of the invoice the amount he paid for freight. When a vendor makes a sale with such an understanding, or, what amounts to the same thing, prepays the freight for the customer, he usually "makes it up" by charging the customer more for the merchandise than he ordinarily would have charged him. If this is true then there is no question but that the amount deducted by the customer should be charged against the sale. This may be done directly, or, as is to be preferred in some cases, indirectly by charging an account that may be called Returns, Allowances and Freight Deductions, the last being added to include this new feature.

Some businesses make it their policy to sell F. O. B. point of shipment because it relieves the management of all worry and trouble as to freight rates and possible changes therein, as well as responsibility for the goods while in transit, but in spite of their general rule, they may make occasional sales F.O.B. destination and prepay the freight or allow the customer to deduct freight paid by him, if merchandise is sent collect. The expense for freight under such circumstances is considered by some accountants in the nature of a selling expense, because the business deviated from its general rule; by others it is considered as a deduction from sales, as they argue that the freight allowance is in effect a reduction in the selling price. Thus in some instances, outward freight may be considered as deductions from sales and in others as selling expense.

In still other cases outward freight may be charged to Cost of Goods Sold account, as for example, when the vendor has one uniform sales prices, regardless of the delivery point. Such cases, however, would be practically limited to those business houses whose sales are restricted to nearby territory.

So you see that as an accountant you would probably have to look behind the scenes at the business policy before you decided upon the proper classification for outward transportation charges.

But whether you decided that they should be deducted from sales, or added to cost of goods sold, or included as selling expense, they would still fall within the general group of operating accounts.

Case (d), of course, covers cash discounts. By some accountants cash discounts are considered from the point of view of the buyer to be reductions in the cost of goods purchased. Therefore from the point of view of the seller, they must be considered as reductions in the selling price, consequently deductible from sales. Other accountants hold that inasmuch as it is not known at the time of sale whether or not purchasers will take advantage of the offer of the cash discount, there is no direct connection between the selling price and the discount to warrant the discount being considered a deduction therefrom, as there is in the case of the allowance of a deduction on account of freight where it is as certain as anything can be that the deduction will be made. It is further argued that inasmuch as the discount privilege is extended as an inducement to the buyer to pay cash, and inasmuch as he cannot take advantage of the offer unless he has available working capital, the allowance for cash discount is a capital earning for the buyer, and consequently a capital expense for the seller. We take this view of the matter, which of course means that Discounts Allowed account would not be shown in the "operating" section of a statement of income but rather in the "financial management" section.

In regard to allowances made to buyers on account of a large volume of business done with the vendor, (case e), these usually take the form of a check sent to the buyer after the close of a given period, amounting to an agreed percentage of the total purchases for the period. Such disbursements may be viewed in the light of commissions paid to get business, and therefore as selling expense.

Net Sales is an important figure to know because it acts in various ways as a barometer of the business. The rise of Net Sales indicates clearer weather—ordinarily larger profits; a drop indicates cloudy weather, ordinarily a falling off in profits. It also appears to be true that expenses in an efficiently managed establishment bear a more or less constant ratio in the long run to net sales. Consequently a noticeable increase in this ratio, not due to an unusual business disturbance, would be indicative of mismanagement.

3. Cost of Goods Sold

Cost of Goods Sold, or Cost of Sales as this item is sometimes called, represents the cost to the business of merchandise sold during the period, the selling price being the amount shown as Net Sales. Consequently the Net Sales minus the Cost of Goods Sold is the excess the business has charged for merchandise over what it cost. This difference is called by various names, such as Gross Trading Profit, Gross Profit from Sales, or Gross Profit. We shall refer to it as Gross Trading Profit.

4. Eliminating Loss Due to Shrinkage in Inventory from Cost of Goods Sold

Your attention is called to the fact that the amount shown as Cost of Goods Sold in a statement of income should represent the cost of the net sales, and yet, if you are not careful, you may overlook a situation where the amount of the cost of goods sold may be overstated, due to a shrinkage in the value of inventory on account of market conditions.

To make the point clear, let us review the inventory method of costing sales, outlined in Lesson 14.

If the inventory at the beginning of the period was........	$10,000
And purchases during the period amounted to................	25,000
	$35,000

And the inventory at the end of the period (correctly counted and valued) was..$18,000

Then the cost of the goods sold during the period (provided no part of the purchases was lost, stolen or otherwise disposed of except by sale) must have been..$17,000

The foregoing statement is based on the assumption that the inventory at the end of the period is figured at what it actually cost the business.

But you were also told in Lesson 14 that conservative accounting practice requires that the inventory be valued at cost or market, whichever is lower. We did not wish to confuse your thought at that time by trying to explain the effect on the statement of income of figuring inventory at market when market was lower than cost, because up to Lesson 14 the statement of income and profit and loss had not even been touched upon. But now think about it a moment.

Assume an inventory at the end of an accounting period of one thousand items. Suppose those one thousand different articles cost the business altogether $18,000 to purchase, but that between the time they were purchased and the end of the accounting period, prices had fallen to such an extent that the inventory, figured at replacement prices, amounted to only $8,000. That would constitute a loss due solely to market conditions affecting the *unsold* merchandise, and yet if the amount of $8,000 instead of $18,000, were used as the final factor in determining the cost of goods sold by the inventory method, the cost of goods sold would be $27,000 in the foregoing review illustration, instead of $17,000.

In other words the cost of the goods *sold* would be burdened with the loss due entirely to the fact that some of the goods remained *unsold*. Some of our largest manufacturing companies showed appalling losses during 1920 and 1921 due to shrinkage in

inventory values during the readjustment period. In some cases if these large losses had been absorbed in the cost of goods sold, the cost of goods sold would have been abnormally large, even in excess of the gross sales. The result of such a method of presentation on a statement of income and profit and loss would have been to show in many instances that merchandise had been sold for less than cost, which would have been contrary to facts and would have led to false comparisons with previous and future periods. So the loss due to the shrinkage of inventory was shown on the statements of these manufacturers as extraordinary losses, or charged to reserves set up for just such contingencies. We shall go fully into the matter of reserves later.

The point of all this is that the accountant should be careful to analyze and to call profits or losses, or anything else, by their right names.

At the same time he must be cautioned not to be too great a stickler for theory, where the point at issue is not vital. In actual business where the object is to make money, a great deal of time and expense cannot be devoted to an elaborate investigation to determine the absolutely correct classification of certain items when there is some doubt in the matter.

Going back to the subject of the shrinkage in inventory value, one bookkeeping method of handling the situation would be to figure the cost of goods sold using the final inventory at market price, which would result in overstating the cost of goods sold, and then to make a journal entry crediting Cost of Goods Sold account and charging "Loss due to Shrinkage in Inventory" with the amount of loss due to shrinkage, which would right the matter. This method would probably be as easy and simple as any other.

5. Entries for Material Returned

If material is returned during a current period that was sold during a prior period, and the customer's account is accordingly

credited during the current period for the cancellation of the sale, what account should be charged? If Sales or Returns and Allowances account is charged, it follows that the gross sales of the current period will be reduced by the cancellation of a sale for which a prior period received credit. Therefore it might appear that that was not the right procedure.

Now let's try charging Merchandise Inventory account when the customer is credited. Some merchandise that was not in the inventory at the beginning of the period has been returned and therefore it is logical to suppose it should be restored to Merchandise Inventory account, but would not the entry just mentioned restore it at selling price instead of at cost?

The answer must be "yes", and this, as you know, would not be the correct thing to do.

We will therefore try the following entry, assuming the selling price to have been $175 and the cost of the goods sold, $150:

Merchandise Inventory	$150	
Loss through Cancellation of Prior Period's Sales	25	
Customer		$175

This entry, then, clearly reflects the fact that a profit of $25, earned in a prior period, was lost in the current period through the sale having been cancelled in the current period. At the same time the material returned is restored to Inventory account at cost and the customer is credited with the amount originally charged to his account.

The foregoing assumes that the material returned was sound. If, however, it was defective, and had to be scrapped, it would not be proper to restore it to the regular inventory account. Consequently the entry might be as follows, assuming a scrap value of $10:

Scrap Merchandise	$ 10	
Spoiled Work	140	
Loss through Cancellation of Prior Period's Sales	25	
Customer		$175

Of course the foregoing entries and names of accounts are merely suggestive of what you might find in actual practice, being used only to illustrate certain principles of accounting. Different business houses might have different bookkeeping methods and names for their accounts, all equally good.

6. Keeping Separate Account of Returns Applicable to Prior Period Sales

We have gone into some detail, in connection with returns of merchandise sold during a prior period, to illustrate how measures may be taken to exclude all transactions affecting a prior period from the showing of the current period's operations on account of sales. Of course the loss of profit due to the cancellation of the sale has to be reflected in the statement of income and profit and loss for the period in which the cancellation was made, but it is possible to report this loss in the "Profit and Loss" section with other "prior period" transactions and unusual losses, rather than in the section which reflects the gross trading profit. The gross trading profit is supposed to be for the *current* period, but some concerns allow the regularly earned profit for the period to be reduced by cancellations of prior period sales, rather than to try to segregate and show separately losses due to cancellation of prior period sales. There is much to justify this practice because then the accumulated gross trading profit for a *number of years* can be readily determined by adding the gross trading profits shown on several statements of income, without the danger of overlooking some figures affecting gross profits which may be tucked away in another section of the statement.

Furthermore, losses due to cancellations in one year on account of sales made in a prior year, are constantly occurring and in the long run, the "lap overs" probably offset. For instance, sales made in 1920 amounting to $1,500, may be cancelled in 1921, and sales made in 1921 amounting to $1,600 may be cancelled in 1922. If the cancellation of 1920 sales should be charged to Sales account in 1921, instead of to some other account representing "prior period" transactions, the showing of the 1921 sales would be approximately correct, inasmuch as the gross sales for 1921 would include $1,600 worth of sales destined to be cancelled in 1922. This would result in a net theoretical error of $100 in the 1921 Sales account which would ordinarily be too trifling to bother with.

It seems more practical not to attempt to analyze cancellations minutely to try to find out to what period the sale belonged, unless a cancellation should be unusually large, or due to some exceptional cause.

7. Selling and General Expense

A business, of course, cannot be conducted without incurring expense. The owner or owners cannot do all the work. Salesmen often have to be employed, as well as the ordinary office force. Advertising has to be done. Selling commissions have to be allowed. Then there may be rent or taxes to pay and various other expenses to be met. It would be impracticable to attempt to give a detailed list here of all the expenses that might be found in all kinds of business houses. It would only be confusing. You should have little trouble in putting any expense into the main group where it belongs, if you know the general principles of classification.

In an ordinary trading business, expenses usually fall into two divisions, Selling and General, although there might be another division called Delivery Expense.

In the group of Selling Expenses would be included, as the name implies, expenses incurred in making sales, such as salesmen's salaries and traveling expenses, salesmen's commissions, advertising and the like.

General Expense includes executive and administrative expenses, the expenses incurred in the conduct of the office routine, and all expenses not more directly assignable to various activities.

If it were desired to include a section in the statement of income for delivery expense, this would include all expenses in connection with delivering merchandise, unless such expenses were properly chargeable to Sales account as an offset to the selling price, or to Cost of Goods Sold account.

Notice in Samuel Brown's statement of income that the selling expenses are totaled, but that this total is not deducted from the gross trading profit. While it is interesting to know the total of the selling expenses, there is no particular object in deducting the same from the gross profit. The remainder would have no particular meaning. The same remarks apply to the total of general expenses. But on the other hand the sum of the selling and general administrative expenses deducted from the gross trading profit, gives the all important figure of net profit from operations.

QUESTIONS

Lesson 22

1. Why is it considered better to open an account for returns and allowances and to close the balance to Sales account at the end of an accounting period than to charge returns and allowances directly to Sales account?

2. Name and explain briefly six things that might occasion a credit to a customer's account other than for the amount of a remittance.

3. Explain briefly the terms (a) Gross Sales, (b) Returns, (c) Allowances, (d) Net Sales, (e) Cost of Goods Sold, (f) Selling Expenses, (g) General Expenses.

4. Why is it important to know the Net Sales of a business?

5. Name six possible selling expenses and eight possible general expenses.

6. State three different ways in which outward freight expense may be classified and explain what conditions govern each particular classification.

7. Why is the amount of returns and allowances an important figure to show separately on a statement of income and profit and loss?

8. Assume that you were the chief accountant for a large manufacturer where the books were closed semi-annually on June 30 and December 31, and that you were notified on July 10th that a large shipment which had been billed to one customer in May for $600,000.00 had been rejected as defective and had been returned, for which full credit was to be allowed the customer.

It was considered that the rejected shipment could be sold for 10% above cost. The profit on the original transaction was 25% of cost. What journal entries would you make, and how would you report the transaction on a statement of income and profit and loss for the six months ended December 31, assuming that the goods had not been resold at December 31, and also that the market price had not declined below the original cost price. The management still considered that the goods could be sold for 10% above cost. Comment on the reason for your entries.

9. Conservative accounting requires that the inventory of merchandise on hand at the end of an accounting period shall be valued on the balance sheet at cost price or market price, whichever is lower. Illustrate by journal entries a practical application of this rule, assuming any facts you wish for the purpose.

LESSON 23

STATEMENT OF INCOME AND PROFIT AND LOSS FORM AND CONTENTS (Concluded)

1. Income Credits and Charges and Profit and Loss Credits and Charges

The next two sections of the statement of income and profit and loss which we are analyzing, comprise the Income Credits and the Income Charges which bring the net result down to Net Income. By Net Income is meant the net income derived *during the accounting period* from the *normal activities of the business* as far as it is reasonably determinable. Below this point are usually taken up in sections called Profit and Loss Credits and Profit and Loss Charges, profits or losses that may be experienced during the period but which, strictly speaking, belong to a prior period. It often happens that books must be closed before all accruals of earnings and expenses for the period can be absolutely determined. They may have to go over to the next period when time will aid in their determination. Then also there may be items that are inadvertently overlooked, and still others that no one could possibly forecast, but which fate decrees shall come to light after the books have been closed and formal statements rendered. In the Profit and Loss Credits and Charges sections are also reported unusual credits to or charges against the profits of the business. The last two sections, then, the Profit and Loss Credits, and Profit and Loss Charges, have been arranged by accountants as a place to report items which, if reported in sections above Net Income, would distort that figure, so that it would not reflect the true net income for the period.

One might be inclined to think that if the true net income for the period is overstated or understated by the inclusion of earnings or expenses belonging to a prior period, no true comparison of

net income one year with another could be obtained, yet the facts of the matter are that there is more chance of securing approximately correct comparisons of net income year by year, if prior period adjustments are absorbed in the current net income, than if they are not.

Suppose, for example, that an item of selling expense of $1,000 were overlooked in the year 1919 and an item of general expense of $900 were overlooked in the year 1920. If, in the statement of income for 1920, the 1919 item of expense were included among the Selling Expenses, instead of among the Profit and Loss Charges (that is, above the Net Income line instead of below it), Net Income for 1920 would be understated by only $100 instead of being overstated $900. The reason for this is that the $1,000 expense of 1919 included in the Selling Expenses of 1920, offsets the omission of a general expense item amounting to $900 from the 1920 report, leaving only $100 overcharged against the operations of 1920.

It is true that the Selling Expense on the 1920 statement would be overstated in this case by $1,000, but this would exactly offset the understatement of Selling Expenses in 1919, by the failure to include the $1,000 there. Furthermore, adding the statements for the two years together, item for item, would give the correct amount of selling expense for the two years, whereas it would not (without a revamping of figures) if the selling expense omitted from the 1919 statements were shown as a Profit and Loss charge in the 1920 statement merely because it was a "prior period" item.

Of course "circumstances alter cases", but we are inclined to believe it better policy on the whole not to include ordinary "prior period" figures among the Profit and Loss Charges and Credits, but to show them rather in the class of earnings or expenses to which they really belong, included in the current period's figures. Any large items thus included could be stated in a footnote in the

statement to explain the exceptionally large amount of the expense or earning, possibly resulting from such practice.

At any rate, if "prior period" items are included among the Profit and Loss Charges or Credits, they should be clearly indicated, so that if any one should wish to prepare a statement of income and profit and loss for say, five years, he could do so fairly easily from the five individual years' statements, at least by a rearrangement of the figures.

Items of an unusual nature are, of course, properly included among the Profit and Loss Charges and Credits. Their inclusion anywhere else in the statement would lead to a misinterpretation of the true net income for the period.

To illustrate what has been said about "prior period" items, consider the following condensed statement of income and profit and loss for three years, 1921, 1920, and 1919, covering Thomas Smith's business:

	Total	1921	1920	1919
Gross Sales	718,000	200,000	253,000	265,000
Returns and Allowances	5,400	900	2,000	2,500
Net Sales	712,600	199,100	251,000	262,500
Cost of Goods Sold	376,395	112,000	130,520	133,875
Gross Trading Profit	336,205	87,100	120,480	128,625
Selling Expenses	46,500	20,000	500	26,000
General Expenses	56,410	25,410	30,000	1,000
Total Selling and General Expenses	102,910	45,410	30,500	27,000
Net Trading Profit	233,295	41,690	89,980	101,625
Income Credits	580	145	325	110
Gross Income	233,875	41,835	90,305	101,735
Income Charges	1,625	325	600	700

Net Income	232,250	41,510	89,705	101,035
Profit and Loss Credits:				
Prior Year Earnings	460	210	250	
Unusual Earnings	2,740	2,240		500
Total Profit and Loss Credits	3,200	2,450	250	500
Gross Addition to Net Worth	235,450	43,960	89,955	101,535
Profit and Loss Charges:				
Prior Year Expenses	51,000	22,000	29,000	
Unusual Expenses	9,640	4,630	3,140	1,870
Total Profit and Loss Charges	60,640	26,630	32,140	1,870
Net Addition to Net Worth	174,810	17,330	57,815	99,665

In preparing the foregoing illustration, a rather exceptional assumption was purposely made. Caricatures usually call attention to certain facts more forcibly than true portrayals. It was assumed that an item of selling expense of $22,000 that was overlooked in 1920 was charged to a selling expense account on the books in 1921, but that the accountant discovered this fact and in preparing the statement of income and profit and loss included it among the Profit and Loss Charges for 1921. Likewise certain general expenses aggregating $29,000 belonging to 1919 did not get charged on the books until 1920 and were included in the Profit and Loss charges on the 1920 report.

Taking the three years together, our illustration shows four things in particular: first, the total of Selling Expenses is understated by $22,000; second, the total General Expenses is understated by $29,000; third, the total Income Credits is understated by $460 (assuming the "prior year earnings" of 1921 and 1920 to have been income credits); and, fourth, the Net Income is overstated $50,540 ($29,000 plus $22,000, minus $460).

Furthermore, the total of $460, if shown only as "prior year earnings" and the total of $51,000 if shown only as "prior year expenses" would have very little meaning, if the proper classification of those items were desired, which would be the case except perhaps in a very condensed statement. The attempt to set forth the detailed classification of the prior year items might prove awkward, as far as the technique of the statement was concerned.

2. Income Charges and Credits Reflect Normal Expenses and Earnings on Account of Capital

The accounts found in the Income Credits section of a statement of income and profit and loss usually reflect the earnings from capital sources, such as interest earned and cash discounts received. The Income Charges represent largely the cost of financing the business such as interest expense, cash discounts allowed, loss on foreign exchange and the like.

3. A Statement of Income and a Statement of Income and Profit and Loss Distinguished

A statement down to the point of net income may be called a statement of income, but if the statement includes Profit and Loss Charges or Credits, it should be called a statement of income *and profit and loss.*

4. Manufacturer's Statement Distinguished by Cost of Goods Sold Detail

Having completed an analysis of a statement of income and profit and loss applicable to a trading concern, let us turn our attention next to one applicable to a manufacturing concern. As the only fundamental difference between the two lies in the detail in connection with the Cost of Goods Sold, we will not illustrate nor discuss the statement beyond Gross Trading Profit.

5. Manufacturer Has Three Kinds of Inventory to Value

The trader is concerned with only one kind of inventory for the simple reason that he sells what he buys. The manufacturer, on the other hand, is primarily concerned with three different kinds of inventories, Raw Material, Goods in Process of Manufacture (usually called "Work in Process" for short) and Finished Goods. He buys his merchandise as Raw Material, sets labor to work to convert it into a different form, and when labor has completed its task the raw material emerges as Finished Goods. Now it almost invariably happens that at the end of an accounting period, there will be on hand some merchandise that is in neither its "raw" nor "finished" state, that is to say the work is still "in process" of completion. So it will be seen that the manufacturer has a few more things to think about than the regular trader in valuing his inventory at the end of the period. Figuring the value of the raw material is to him the easiest part. In addition, he must determine the amount of labor cost and factory expense, as well as the cost of raw material, included in the work in process and in the finished goods unsold, and this is not so simple.

This subject, in so far as it involves an explanation of how detailed costs of Work in Process and Finished Goods are worked out, belongs to cost accounting, which you will study later, but the *principles* involved are elementary enough to make you acquainted with them at this point. And it is desired that you understand them now.

6. Fundamental Principles of Cost Accounting Illustrated

One may explain the *principles* of determining the manufacturing cost of Finished Goods in the largest and most diversified industrial plant in the world by a simple recipe to be found in a cook book for making cup cake, as follows:

1 cup butter
2 cups sugar

3½ cups flour
4 eggs
3 teaspoons baking powder

These are the "raw materials" that go into the making of the cake. The minute the cook mixes them up in a bowl labor has been added and they become work in process. From that time until the cake is done the batter, resulting from the mixing of the ingredients, remains work in process, but the work in process may be in various stages. It may be just batter. It may be batter formed into the shape of small cakes. It may be batter formed into the shape of small cakes but put into the oven for baking. The batter in the oven may have been there five, ten, or fifteen minutes, but still not ready to be removed, when the "end of the accounting period" arrives.

If the cost of the butter, sugar, flour, eggs, and baking powder were the only thing to consider, it might be easy to determine, offhand, the value of the work in process by determining the proportion of the batter still in process at the end of the period, compared with the amount of batter originally prepared. But the cook's wages ("Labor") have to be considered and the cost of the heat to bake the batter, and the rent of the kitchen, and a certain amount for the use of cooking utensils and the like. All these things have to be taken into account before the real cost of the work in process can be determined. But you are not to worry at present as to *how* the value of the inventory of Work in Process or of Finished Goods is determined. You will learn about that later. For the time being we will tell you only that the cost of labor and other expenses connected with the process of manufacture are not considered as expense in the sense that a clerk's salary in the accounting department is an expense, but are added to raw material to enhance its value gradually until it becomes "Finished Goods"; that the value of both Goods in Process and Finished Goods therefore contains three elements of cost, raw material, direct labor,

and factory expense. By direct labor is meant the cost of the labor employed directly in manufacturing the product. By factory expense is meant other expenses of manufacturing such as fuel, rent of factory, repairs, and amounts paid for "indirect" labor in the factory, which includes superintendence, foremen, janitors, crane operators, watchmen and the like.

7. Cost of Manufacture

Now devote your attention to observing what is done in a statement of income and profit and loss with the value of the inventory of work in process, *after it has been calculated,* letting the future take care of explaining to you *how* the value is obtained. It is used to determine the cost of "Finished Goods" in exactly the same way as the trader's final inventory is used to determine the cost of goods sold. For example, taking round amounts to illustrate:

Inventory of Work in Process at the Beginning of the Period................		$15,000
Plus the three Elements of Cost Used During the Period:		
Raw Material	$16,000	
Direct Labor	20,000	
Factory Expense	25,000	61,000
		$76,000
Less Inventory of Work in Process at the End of the Period....................		36,000
Cost to Manufacture the Goods Finished During the Period............		$40,000

Notice that the figure of $40,000 is the cost to *manufacture* the goods finished during the period. This is *not* the cost of goods sold, as would be quite obvious if none of the goods manu-

factured during a given period were sold, but they were all stored in a warehouse.

8. Cost of Manufactured Goods Sold

To arrive at the cost of manufactured goods sold an additional step has to be taken as follows:

Inventory of Finished Goods at the Beginning of the Period	$20,000
Add Cost of Goods Finished During the Period (as above)	40,000
	$60,000
Deduct Inventory of Finished Goods at the End of the Period	8,000
Cost of Finished Goods Sold	$52,000

The cost of manufacturing finished goods is to the manufacturer as the cost of merchandise purchased is to the trader, and after the cost of manufacturing has been determined, the process of arriving at the cost of goods sold is the same for either a manufacturer or a trader, if the inventory method is used. Another method of costing sales will be explained in the lessons on cost accounting.

9. Increases and Decreases in Inventory

From the foregoing it is apparent that the statement of income and profit and loss for a manufacturer will contain considerably more detail than one for a trader. To aid in cutting down detail, some accountants will not show the inventory at the beginning and at the end of the period for "Work in Process" and "Finished Goods" on the statement of income and profit and loss, but only the increase or decrease in the value of the final inventory as compared with the inventory at the start. This gives the same result,

but it may be confusing to you in reading the statement, unless you understand the reason why the results are the same. For example, compare the two methods of determining Cost of Goods Sold as follows:

First Method		Second Method	
Inventory at the start	20,000	Purchases	10,000
Purchases	10,000	Add, Decrease in Inventory	2,000
	30,000		
Less Final Inventory	18,000		
Cost of Goods Sold	12,000	Cost of Goods Sold	12,000
	—*or*—		
Inventory at the start	25,000	Purchases	12,000
Purchases	12,000	Less Increase in Inventory	1,000
	37,000		
Less Final Inventory	26,000		
Cost of Goods Sold	11,000	Cost of Goods Sold	11,000

Why you add a decrease in inventory to purchases and subtract an increase to arrive at the cost of goods sold may be somewhat confusing, and each time you see this method of presentation you may have to stop to "reason it out all over again" unless you get the principle involved clearly fixed in your mind. A good way to do is to remember that the inventory at the beginning of the period is always an addition and the inventory at the end of the period always a deduction. Therefore if the inventory at the beginning exceeds the inventory at the end, the *excess* is an addition to purchases; vice versa, the *excess* is a subtraction from purchases. If the inventory at the start exceeds the inventory at the end, the inventory has decreased; vice versa, it has increased. Therefore the amount of the decrease should be *added* and the amount of the increase should be *deducted* in the formula for determining either the cost of manufacturing finished goods or the cost of sales.

Following is a typical statement of a manufacturing concern that exemplifies nearly all that has been said:

Gross Sales		$80,910.20
Returns and Allowances		3,146.05
Net Sales		$77,764.15
Cost of Goods Sold:		
Cost of Manufacture:		
Direct Labor		$23,139.06
Materials Used		16,582.60
Factory Expense:		
Manufacturing Supplies	$5,559.67	
Depreciation	4,125.60	
Janitors, Watchmen and Elevatormen	3,210.00	
Taxes	1,156.93	
Repairs	1,119.90	
Insurance	741.30	
Electric Power	545.00	
Fuel	492.18	
Trucking	365.10	
Light	306.25	
		17,621.93
Total		$57,343.59
Add Decrease in Inventory of Work in Process		4,104.72
Total Cost of Manufacture		$61,448.31
Less Increase in Inventory of Finished Goods		2,755.20
Total Cost of Goods Sold		$58,693.11
Gross Trading Profit		$19,071.04

10 Summary Review

What has been said thus far on the general subject of the statement of income and profit and loss may be summarized as follows:

(1) That business activities are divided into "accounting periods".

(2) That a statement of income and profit and loss is a more or less itemized report of the profits and losses *covering an accounting period* as compared with a balance sheet, which reports the financial condition in respect to assets and liabilities *as of a given date.*

(3) That nominal accounts are only temporary accounts opened to analyze and measure earnings and expenses for a given period, to be closed out at the end of the period into a clearing account called Profit and Loss account.

(4) That Profit and Loss account is, itself, only a temporary account, the balance of which is carried to an account representing net worth. By this procedure there is only one periodical entry in the net worth account, which is less confusing than if it were debited and credited with every expense incurred or earning enjoyed.

(5) That a statement of income and profit and loss can be easily prepared from a Profit and Loss ledger account if the essential details are shown therein, properly grouped.

(6) That a statement of income and profit and loss, and a balance sheet too, may even be prepared from a trial balance, and easily prepared, if the accounts are arranged in the order of assets, liabilities, net worth accounts, earnings and expenses. This method is

commonly adopted as most practical in the preparation of daily or monthly statements, as it is not usual to close books more often than semi-annually or annually.

(7) That profits should never be anticipated.

(8) That the Profit and Loss account for each accounting period should reflect as far as possible only the profits or losses for that period.

(9) That the endeavor to have each period stand on its own record has developed the accounting practice of accruing earnings and expenses that have not actually been collected nor paid, respectively, in cash during the period, and also the practice of deferring charges and credits that occur in one period but are applicable to another.

(10) That closing the books usually signifies:

(a) Making all the necessary adjustments of accounts, namely setting up accruals, deferred charges and credits, and the like.

(b) Going through the bookkeeping routine of closing out all nominal accounts.

(11) That commercial business transactions are commonly thought of in two main groups as follows:

(a) Transactions incident to manufacturing and trading.

(b) Transactions incident to financing the business.

(12) That the statement of income and profit and loss may be of the running form or of the account form, the former being more popular and therefore more in evidence.

(13) That the running form of statement is merely the arrangement of nominal accounts in groups. The first group starts with the Gross Sales, and shows deductions for Returns and Allowances and Cost of Sales, the resultant figure being the Gross Trading Profit. From the Gross Trading Profit, the totals of Selling and General Expenses are deducted to arrive at the Net Trading Profit. The total of Income Credits and the total of Income Charges added to and deducted from the Net Trading Profit, respectively, give the Net Income for the period.

(14) That the Income Credits and Charges represent normal earnings and expenses on account of capital.

(15) That an attempt is usually made to keep Net Income unaffected by unusual profits or losses and sometimes by profits or losses experienced during the period but really applicable to a prior accounting period.

(16) That two more sections may be added to the statement of income below the amount shown as Net Income to report unusual transactions and profits or losses applicable to prior periods, in which case the statement is called a statement of income *and profit and loss.*

(17) That the practice of excluding prior period items from above the Net Income line may be overdone; that, in our opinion, they may be included there without special mention if they do not materially affect the Net Income showing. If they do materially affect it, a footnote is in order, or they may be excluded and shown below the Net Income line, provided they are clearly indicated.

(18) That loss due to shrinkage of inventory value on account of market conditions, if considerable, should not be absorbed in Cost of Goods Sold account.

(19) That cost of manufacture includes three elements:
   (a) Raw material consumed.
   (b) Direct labor.
   (c) Factory expense.

(20) That a statement of income and profit and loss for a manufacturer does not differ fundamentally from a statement for a trader, except in the matter of showing greater detail in connection with the Cost of Goods Sold, in the case of the manufacturer.

QUESTIONS

Lesson 23

1. What is the distinction between Income Charges and Profit and Loss Charges; between Income Credits and Profit and Loss Credits?

2. Let us assume that you were called upon to make an audit of the books of a certain company, and that you found that the Commissions account for the year ended December 31, 1921, included commissions, amounting to $25,000.00, earned by the company's salesmen in 1920 on sales billed during 1920. It is further assumed that the company did not set up a liability at December 31, 1920, for these commissions. Where would you include this item in a statement of income and profit and loss for the year ended December 31, 1921, and what would be your reason for so doing? State whether or not you could properly include it in any other place in the statement instead. If so state where, and give reasons for your answer.

3. Assuming that you found an accrued liability of $25,000.00 set up on the books of the company at December 31, 1920, for the commission expense mentioned in the previous question, which (when paid in 1921) was charged to Commission account in 1921, how would you show the $25,000.00 in the statement of income and profit and loss for 1921? If there are two proper ways of showing the figure in the statement of income and profit and loss for 1921, state your preference and give your reasons.

4. What is the difference between a "statement of income", and a "statement of income and profit and loss"?

5. What are the three elements of the cost of manufacture? Explain each briefly.

6. Given the following data, state the cost of direct labor entering into the manufacture of one bicycle, and show how you arrived at the amount.

Cost of manufacturing 1,000 bicycles during the year	$80,000.00
Inventory of work in process at the beginning of the year, including raw material ($25,000) and factory expenses ($10,000)	70,000.00
Inventory of work in process at the end of the year, including raw material ($12,000) and factory expenses ($3,000)	30,000.00
Factory expenses during the year	5,000.00
Material consumed during the year	15,000.00

7. When, if ever, would the cost of finished goods sold during a period of six months equal the cost of manufacture during the same period? Explain your answer.

8. From the data given below prepare (in skeleton form), two statements of income and profit and loss for a sole proprietor engaged in manufacturing, exemplifying two different ways in which the inventory at the beginning and at the end of the period may be shown. Give reasons why you think one way is preferable to the other, if you have a preference.

General Expenses	$ 30,000.00
Factory Expenses	153,000.00
Returns and Allowances	4,300.00
Raw Material Consumed	144,000.00
Inventory of Work in Process at the Beginning of the Period	110,000.00
Inventory of Finished Goods at the End of the Period	40,000.00
Gross Sales	720,000.00

Inventory of Work in Process at the End of the Period	65,000.00
Profit and Loss Charges	865.00
Income Credits	8,200.00
Profit and Loss Credits	1,210.00
Selling Expenses	60,000.00
Inventory of Finished Goods at the Beginning of the Period	50,000.00
Income Charges	5,400.00
Direct Labor	207,000.00

9. Make an outline of Lessons 19 to 23 (both inclusive) in accordance with the rules on how to study explained in Volume 1. Do not make an outline of each lesson separately, but consider the five lessons as one lesson.

LESSON 24

DEPRECIATION AND ITS CAUSES

1. Introductory

If a man invested $100,000 in taxicabs, and found that the revenue collected from passengers at prevailing rates was more than sufficient to pay the chauffeurs' wages, the running expenses of all the cars, the expenses of maintaining the garage, and general office and other similar expenses, would you consider what he had left as his "net profit"? Assuming that you did and that this net profit amounted to $10,000 per year, could this man ever become bankrupt, if this amount remained constant? Not so many years ago, the average business man would have answered this question with an unqualified "no", but now he would ask you first whether "depreciation" had been included in the calculation of expenses. If an allowance for wear and tear of the cars, or an allowance for destruction by accident, for obsolescence, or the like, had not been taken into account, he would tell you that the figure apparently representing "net profit" was not, in fact, net profit at all. He would add that if the depreciation exceeded ten per cent per annum, the man would have to discontinue business in time, or put up more capital, if he did not obtain more revenue through fares or cut down his operating expenses materially.

Obviously when his cars became so old and dilapidated that they could not be run effectively, the owner of the business could not go back to all the passengers who had ridden in them and ask for the amount necessary to buy new cars. If the amount for depreciation had not been included in the fare, the owner alone would have to pay for the loss incident to the abandonment of the worn out equipment.

Accountants have done a great deal within the past decade to educate the business man not to overlook the item of depreciation

of his fixed assets in calculating net profits for the year; but the federal income tax law, which permits a deduction for depreciation to be included in the tax return, has perhaps done more than anything else to cause the accounting principle involved to become widely known.

The subject of depreciation from an accountant's point of view may be broadly divided into four general topics, represented by the following questions:

(1) What is depreciation?
(2) Why should an accountant be interested in it?
(3) How is it calculated?
(4) What is done with it on the books?

The first two questions are answered in this lesson. Methods of calculating and recording depreciation are discussed in the two following lessons, respectively.

2. What is Depreciation?

To depreciate literally means to become less precious. Depreciation may be defined as the measure of the loss of property value through physical deterioration as a result of its use in trade or business, as distinguished from the word obsolescence, which conveys the idea of the lessening in value of a thing due to its having become out of date or inadequate. While a distinction is made between depreciation and obsolescence, the two topics are so closely related that they will be discussed together in this lesson.

Everything in nature, both animate and inanimate, seems to be subject to the unchangeable law of change. Creation and destruction appear to be constantly at work together. Man is born, lives his alloted time, and dies; and so it seems to be with whatever he may build.

In the business world, depreciation is thought of particularly in connection with fixed assets, such as buildings, plant equipment,

rolling stock, and furniture and fixtures. Take machinery, for example. Let us assume that the service life of a certain machine is ten years. If that machine were built in ten layers, one of which was used up each year in operating the machine, and was actually removed and thrown away at the end of the year, the "depreciation" would be quite tangible and visible. The fact that depreciation is not always so apparent as it would be in this case, is no reason why a business man should ignore it as an item of cost, and yet the fact that depreciation can not be touched nor seen while it is at work may be the excuse for its having been overlooked so long by so many business men.

As a matter of fact depreciation is like interest on borrowed money, in that it never sleeps. It works night and day as relentlessly as the ocean waves beat upon the shore.

3. Depreciation an Element of Cost or Expense

The loss incident to the wear and tear of a machine used to manufacture an article should be considered as much a part of the cost of producing that article as the raw material consumed, or the coal burned to generate the power to operate the machine. The machine is being *consumed* by the process of manufacture as surely as the coal and oil that are used to keep it going, even though the fact may be less apparent and the money value of the amount consumed more difficult to determine. For this reason the purchase of a new machine to replace an old one of the same value, is no more a capital outlay than the purchase of additional coal to keep the fires burning. Accountants have consistently and persistently insisted upon this truth being recognized, until the principle has become so well established that it no longer needs a champion, even the courts having decided in its favor.

Whether the amount of depreciation is an item of factory expense or whether it should be included in some other classification, depends upon how and where the asset depreciated is used.

The depreciation of factory equipment, for instance, would be an element of manufacturing cost, whereas the depreciation of office furniture and fixtures would be an item of general expense.

4. The Idea Underlying the Charge for Depreciation

The fundamental idea underlying depreciation, of course, is that the amount of depreciation shall be charged against the operations of the period in which it occurs, so that the whole burden will not fall upon the period in which the depreciated asset has finally to be replaced. If a machine is in operation five years before it gives out, surely it is only fair that each year should contribute, so to speak, toward the replacement of the machine which it helped to destroy.

This is all in accordance with one of the basic rules mentioned in Lesson 19, namely that each accounting period should bear its own proper proportion of expenses.

There is, also, another principle involved, and that is if depreciation is not taken into account, the original value of the asset and not the depreciated value, will be reported on the balance sheet. This means, consequently, that the asset would be overstated. The accountant must have his eye on the balance sheet too, as well as on the statement of income. This leads naturally to the question whether or not the amount of depreciation which the accountant is so careful to insist should be charged to expense, is credited to the asset account or not. Theoretically it should be, but practically it usually is not. Instead it is generally credited to an account called "Provision for Depreciation" or "Reserve for Depreciation", as it is more frequently called, in order that the original cost value of the asset may be left as a balance in the asset account, and in the second place, that there may be a separate account to register the accumulation of the amounts periodically charged to expense for depreciation. Then on the balance sheet the credit balance of the reserve or "valuation" account, as it is sometimes called, may be

deducted from the balance of the asset account and the net result shown as the depreciated value of the asset at the date of the balance sheet.

This depreciated value might not be the valuation that an engineer would place on the asset as of the balance sheet date, but it is not imperative from an accounting point of view that either "scrap" values or "efficiency" values be assigned to the fixed assets of a going concern for balance sheet purposes.

The accountant is more concerned in arriving at a "fair" charge against operations for depreciation than he is in obtaining an absolutely correct valuation for the asset as figured by an engineer. In other words, he approaches the problem from the side of the statement of income. He is primarily interested in arriving at what he considers a proper charge to expenses for depreciation. When he obtains that amount, he applies it toward the reduction of the asset. He could of course first determine how much the asset had depreciated from an engineering point of view during the period and use that amount as his charge against expenses, but such a method might lead to unreasonable variations in the depreciation charge. For example, a machine may be operated for several years at about the same high percentage of efficiency and then suddenly in one year its efficiency may be impaired 60 to 80 per cent. The accountant would rather see the burden of depreciation distributed over accounting periods more evenly than it would be if it followed closely the decline in the asset's efficiency from the operating view point.

5. Why an Accountant is Interested in Depreciation

The problem of determining the average life of a fixed asset under given conditions is essentially an engineering problem. The accountant, however, is also concerned in this matter of depreciation for it is his duty to see that it is properly taken care of on the books. He must, therefore, have some knowledge of its causes

in order to know when and where to look for it. The more he knows also about rates of depreciation, the better he is equipped for his work because then he has some idea of the adequacy or the inadequacy of the provision for depreciation which he may be called upon to make as an "inside" accountant or to check as an "outside" auditor.

6. Causes of Depreciation

Some of the causes usually given for depreciation are as follows:

(a) Physical deterioration.

(b) Lapse of time.

(c) Depletion.

(d) Market declines.

(e) Accidents.

Not all of these causes, however, are allowed to influence the amount of depreciation to be charged each accounting period.

7. Physical Deterioration

This is the result of natural wear and tear from the use of the asset in the business. Everything wears out in time. Even a stone will be destroyed by the constant dripping of water.

The assets most commonly found in business subject to physical deterioration are buildings, rolling stock, machinery and tools, furniture and fixtures, and the like. Physical deterioration may occur even while the asset is not in use. Machines, like human beings, are usually better off working than idle. A building that is occupied will, as a rule, remain in good condition longer than a vacant one, because the occupant will take some care of it. This leads us to the statement that the service life of an asset depends a great deal upon the amount spent for its maintenance. It is also true that an asset depreciates and will eventually have to be abandoned

regardless of the care given to it. Careful handling and repairs retard depreciation, but they do not stop it; just as good food, the right kind of clothing, hygienic living conditions, and proper medical attention, all help to preserve life, but they cannot singly or collectively prevent death.

8. Lapse of Time

Depreciation due to lapse of time is particularly applicable to franchises, leases and other intangible rights. For example, the value set upon the privilege of using a certain right of way (usually what it cost to secure the privilege) depreciates more and more as the time set for the expiration of the franchise approaches. Likewise the value of improvements to leased property depreciates directly in proportion to elapsed time, if the cost of the improvements must be sacrificed under the terms of the lease.

9. Depletion

This is a term applied to assets that are used up in business without any possibility of being replaced, such as coal mines or oil wells. Depletion, however, is not, strictly speaking, depreciation. Surely a stock of merchandise on the shelf of a merchant does not depreciate by being removed to fill sales. It may diminish, but it does not depreciate in the true sense of the word. The financial interests that buy a mine know full well that when the mine is exhausted, their enterprise is over, at least as far as that mine is concerned. Therefore the problem involved is to estimate as accurately as possible the contents of the mine, and to charge enough for the sale of the output to pay expenses, get back the capital invested, and leave something over in the way of a profit. Dividends on mining stock are therefore considered in the light of a return of capital, as well as a distribution of profits, and it is not necessary to set aside anything from gross sales in order to keep the original capital intact, unless there is some good reason for withholding the return of the capital until the mine is exhausted and for distributing only the estimated profits in the meanwhile.

10. Market Declines

There is a form of depreciation due to market declines, but this is not ordinarily taken into account on the books, except in the case of merchandise inventories by those who deal in merchandise, and in the case of stocks and bonds and similar securities by those who make it their business to buy and sell securities. Land used for a factory site, for instance, could not ordinarily be said to depreciate by reason of physical deterioration, although it might easily depreciate through a fall in land values, as the result of a change in the center of manufacturing activities. On the other hand, it might appreciate in value. Such fluctuations, however, do not affect the cost of production, as does the wear and tear of plant equipment, and it is therefore ignored by a going concern. So an accountant would ordinarily have no occasion to provide for the depreciation of land, unless land were used for agricultural purposes, in which case depreciation sometimes becomes a considerable factor.

11. Accidents

To use a familiar quotation, "accidents may happen in the best regulated families". So it is with business, but some plants may be more liable to them than others. For example, a manufacturer of dynamite runs a greater risk than a manufacturer of men's clothing.

The possibility of accidents must not be overlooked and some provision made for it, but amounts charged against income for this purpose are usually considered for "contingencies" and not for "depreciation". Accident insurance is generally taken out where it is considered needed, in which case the premium for the insurance would properly take the place of the "depreciation charge", if the amount of insurance fully covered the risk.

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It is not hard to understand, even if one is not an engineer, that a piece of equipment will deteriorate faster toward the end of its service life and will require a greater outlay for repairs than at the beginning. In addition to that, its earning capacity will be less, owing to a loss in efficiency. The question now arises as to whether or not the accounting periods in which the greatest amount of depreciation actually takes place shall be charged with the greatest amount of depreciation, or whether the amount shall be "averaged" over the life of the asset. Some methods of calculating depreciation provide for an ever increasing charge for depreciation; one method, known as the "Straight Line" method, provides for an evenly distributed charge, while others provide for a charge to each accounting period based on the proportionate number of hours the asset was used during the period, or perhaps on its physical output.

The methods that charge the accounting period in proportion to the use it makes of an asset, or even the average charge, appeal

12. Causes of Obsolescence

The two principal causes of obsolescence are inadequacy and improvements in the arts.

13. Inadequacy

An asset may depreciate in value if for no other reason than that it becomes inadequate. It may have been adequate at the time it was acquired, but conditions may have changed later so as to render it entirely unsuitable for use, in spite of the fact that it had not depreciated materially through physical deterioration. A good example of this is seen in a sudden growth in the demand for the output of a plant which makes it imperative to install machines of greater capacity. This condition may, or may not, have been foreseen. If it was foreseen it is probable that the management considered it more economical in the end to start with the low output equipment and scrap it when the time came to install larger machines, than to operate the larger machines from the beginning. If a business starts with the expectation that its equipment may, in a given number of years, become inadequate, there can be no excuse for overlooking the provision for obsolescence on account of inadequacy, if that obsolescence exceeds the depreciation from physical deterioration.

14. Improvements in the Arts

Obsolescence may also be due to an improvement in the arts. That is to say, a new invention or a new type of machine may render an old type practically useless. Suppose, for example, that a newly invented machine reduced the cost of manufacturing a certain product so materially that a manufacturer using the old type could not compete with one using the new. It is easily conceivable that he might find it necessary to scrap the old and buy the new in order to continue in business. From the foregoing it may be seen that a lessening in value on account of obsolescence is more likely to be found in connection with special equipment, than in connection with standard equipment.

15. General Comments

From the number of methods worked out for calculating the periodical charge for depreciation it would seem that almost everybody had tried to solve this difficult problem. It *is* a difficult problem; there is no doubt about that. In fact, it is one of the most perplexing things you will meet in accounting. Not that the *theory* of depreciation is hard to understand; it is the *calculation of the amount* properly applicable to each accounting period included in the service life of a given asset that is difficult.

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14. Improvements in the Arts

Obsolescence may also be due to an improvement in the arts. That is to say, a new invention or a new type of machine may render an old type practically useless. Suppose, for example, that a newly invented machine reduced the cost of manufacturing a certain product so materially that a manufacturer using the old type could not compete with one using the new. It is easily conceivable that he might find it necessary to scrap the old and buy the new in order to continue in business. From the foregoing it may be seen that a lessening in value on account of obsolescence is more likely to be found in connection with special equipment, than in connection with standard equipment.

15. General Comments

From the number of methods worked out for calculating the periodical charge for depreciation it would seem that almost everybody had tried to solve this difficult problem. It *is* a difficult problem; there is no doubt about that. In fact, it is one of the most perplexing things you will meet in accounting. Not that the *theory* of depreciation is hard to understand; it is the *calculation of the amount* properly applicable to each accounting period included in the service life of a given asset that is difficult.

Take a machine as a favorite illustration. It may operate several years apparently "as good as new". Then it will begin to require an increasing amount of repairs to keep it in a condition of workable efficiency. When it reaches the point where repairs are too costly and not worth while, it is usually "junked". In other words, as soon as it is installed, it begins to slide toward a precipice. It gains momentum as it slides until finally no amount of strength exerted can keep it from going over the edge.

It is not hard to understand, even if one is not an engineer, that a piece of equipment will deteriorate faster toward the end of its service life and will require a greater outlay for repairs than at the beginning. In addition to that, its earning capacity will be less, owing to a loss in efficiency. The question now arises as to whether or not the accounting periods in which the greatest amount of depreciation actually takes place shall be charged with the greatest amount of depreciation, or whether the amount shall be "averaged" over the life of the asset. Some methods of calculating depreciation provide for an ever increasing charge for depreciation; one method, known as the "Straight Line" method, provides for an evenly distributed charge, while others provide for a charge to each accounting period based on the proportionate number of hours the asset was used during the period, or perhaps on its physical output.

The methods that charge the accounting period in proportion to the use it makes of an asset, or even the average charge, appeal

12. Causes of Obsolescence

The two principal causes of obsolescence are inadequacy and improvements in the arts.

13. Inadequacy

An asset may depreciate in value if for no other reason than that it becomes inadequate. It may have been adequate at the time it was acquired, but conditions may have changed later so as to render it entirely unsuitable for use, in spite of the fact that it had not depreciated materially through physical deterioration. A good example of this is seen in a sudden growth in the demand for the output of a plant which makes it imperative to install machines of greater capacity. This condition may, or may not, have been foreseen. If it was foreseen it is probable that the management considered it more economical in the end to start with the low output equipment and scrap it when the time came to install larger machines, than to operate the larger machines from the beginning. If a business starts with the expectation that its equipment may, in a given number of years, become inadequate, there can be no excuse for overlooking the provision for obsolescence on account of inadequacy, if that obsolescence exceeds the depreciation from physical deterioration.

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to us as more equitable than any method that allows the later periods to shoulder the heavier burden, through really no fault of their own. It seems hardly fair that the accounting period in which the asset *happened* to be acquired, and those periods immediately following it in time, should be favored above the later periods.

In order to be able to calculate the amount of depreciation in connection with a given asset, one must know its cost, its estimated life, and its estimated scrap value (if it will have any) and must take into consideration also the possibilities of its becoming obsolete.

In the next lesson we will examine more closely into the methods employed to calculate the amount of depreciation.

QUESTIONS

Lesson 24

1. Define depreciation.

2. Distinguish between depreciation and obsolescence.

3. Depreciation is an expense. Can it ever properly be a deferred charge? Give reasons for your answer.

4. Classify the following items of depreciation expense; (a) depreciation of factory building, (b) depreciation of delivery equipment, (c) depreciation of furniture in the accounting department, (d) depreciation of furniture in the sales department, (e) depreciation of furniture in the president's office, (f) depreciation of standard machinery, (g) depreciation of special machinery.

5. Will the failure to provide for the proper depreciation charge during any accounting period affect the correctness of the balance sheet in any way? If so, how?

6. Give two reasons why the amount charged to Depreciation Expense account should not be credited to the asset account representing the asset which has depreciated.

7. Why is an accountant interested in depreciation, depreciation being essentially an engineering problem?

8. Mention five causes of depreciation and state two assets which may be affected by each cause.

9. Why does not an accountant have all the assets subject to depreciation appraised by an engineer at the end of each accounting period, and charge to depreciation the difference between the appraised value of the assets at the beginning of the period and the appraised value of the assets at the end of the period (leaving out of consideration possible purchases of assets during the period)?

10. Name three assets to which depreciation due to declining market values may particularly apply. Explain by what businesses depreciation from this cause should be considered, and by what businesses it may be ignored.

11. Explain two causes of obsolescence.

LESSON 25

METHODS OF CALCULATING DEPRECIATION

1. The Straight Line Method

This method arrives at an average charge, based on the estimated service life of the asset. That is to say, if it has a life of ten years, one-tenth of the cost of the machine (less any "residual", or "break-up" or "scrap" value which it may have at the end of its life) would be charged against the operations of each year as depreciation expense. Right here it is well to remember that the life of an asset can really only be estimated. Furthermore, much depends on the care given to it, as has been said before. Engineers, however, have worked out some close approximations, which can be relied upon to apply to normal conditions. Strictly speaking, the amount to be spent for upkeep of the asset during its service life should also be estimated and added to the cost of the asset and the sum of these two items considered as one, but as a general rule repairs are charged to the expense of the period in which they are made. It is obvious that any estimate of the repairs needed on a physical asset during the estimated service life would be largely guesswork, and that an accurate computaton of this amount would be practically impossible.

The Straight Line method appears to be the one most frequently used by business men, possibly because it appeals to them as "fair enough". At any rate, it is certainly the easiest to calculate.

2. The Percentage of Diminishing Value Method

This method provides for a heavier charge for depreciation in the earlier years and a lighter charge in the later years. Considering that repairs are lighter in the earlier years and heavier later on, it would seem that this method approaches the same results as would be obtained by the Straight Line method, if in using the latter method the estimated cost of repairs were added to the cost

of the asset and the sum of the two pro-rated. In other words, it would seem as if the percentage of diminishing value method, if the policy is to charge repairs to the accounting period in which they are made, would result in an approximately even charge to each accounting period during the service life of the asset, because in later years the charge for repairs would become heavier, but the charge for depreciation would become lighter.

To illustrate the calculation of depreciation by this method, assume an asset value at the start of $5,000 and a rate of depreciation of ten per cent per annum. The amount of depreciation the first year would be ten per cent of $5,000, or $500. Deducting $500 from $5,000, would leave $4,500 as the "diminishing value", on which to calculate the next year's depreciation. The next year's depreciation would therefore be ten per cent of $4,500, or $450, as compared with $500 the first year. So it will be seen how the depreciation charge would be smaller and smaller each year, because the fixed rate of depreciation would be applied to a diminishing principal sum.

Obviously the diminishing principal sum could never become zero, however, and the series of calculations might, from the point of view of mathematics, go on forever, like Tennyson's brook. However, if a scrap value is deducted from the original cost, and the difference figured as the amount of depreciation to be spread over a given number of years, there would be a definite end to the series. For example, if the above mentioned asset had a scrap value of $1,000, the principal sum to be depreciated, $5,000, could be made to gradually approach and equal $1,000. The fixed rate of depreciation to apply under this method to a given sum in order to make it equal another given sum at the end of a given time, may be computed by a mathematical formula. Suppose in this case that the service life of the asset was three years. In order to determine the rate of depreciation to use, it would be necessary to find the cube root of $1,000 divided by $5,000, and subtract the result from one. In other words, it would be necessary to divide the scrap

value by the cost value and get the root of the quotient as expressed by the number of years of service life, and subtract the result from one. In this particular case $1,000 divided by $5,000 is 2/10. The cube root of 2/10 is .5848, which subtracted from 1, gives .4152. That is to say the rate of depreciation per annum would be 41.52%. The following schedule illustrates the discussion:

Year	Value at January 1	Annual Depreciation	Value at December 31
1922	$5,000.00	$2,076.00	$2,924.00
1923	2,924.00	1,214.04	1,709.96
1924	1,709.96	709.98	999.98

The final result, $999.98, is within two cents of the estimated scrap value of $1,000, the slight error resulting from not having computed the percentage to a sufficient number of decimal places.

If the service life were five years, you would have to get the fifth root of the above-mentioned quotient; if it were six years, the sixth root, and so on. Roots may easily be computed by the use of logarithmic tables, if you know how to use them. Their use can be learned without a knowledge of higher mathematics. This is mentioned in case you are ever called upon to compute depreciation by the diminishing value method, and should not happen to know how to proceed.

3. The Sum of Expected Life Periods Method

Under the Diminishing Value method, you saw how the rate of depreciation remained fixed but the principal sum varied. Under the Sum of the Expected Life Periods method, the principal sum remains fixed while the rate varies. To illustrate how the varying rates are determined, let us assume that a machine has an estimated life of four years. When first installed it is "expected to live" four years. At the beginning of the next year it is "expected to live" three years; at the beginning of the next year it

is "expected to live" two years, and at the beginning of the next year it is "expected to live" one year. Now add all the "expected to live" years and you will get ten. Using ten as a denominator of a fraction in each case, the various depreciation rates would be as follows: 4/10, 3/10, 2/10, 1/10. Thus you see that under this method, also, the amounts charged to expense for depreciation become smaller and smaller. In other words, 40% would be charged to depreciation the first year, 30% the second year, 20% the third year, and 10% the fourth year.

4. Depreciation Based on Output

Another method of calculating depreciation is to estimate how many units the asset can produce during its service life and then charge each accounting period its share of depreciation according to the output during that period. For example, if a machine costing $3,000 is capable of producing 10,000 manufactured units, and it produces 1/5 of those units the first year, and 1/20 the second year, the first year's depreciation would be computed as 1/5 of $3,000 and the second year's 1/20 of $3,000, disregarding any possible residual or scrap value.

Under this method, if the machine should remain idle part or all of an accounting period, no depreciation would be charged while it was idle, although, as a matter of fact, idle machinery depreciates.

5. Depreciation Based on Service Hours

This method is similar to the output method just mentioned, except that the life of the asset is estimated in service hours and the charge for depreciation is based on the number of service hours the asset was used during a given period. Both of these methods appear to be fairer than the Straight Line Method in cases where considerable overtime work is done, or where the process of manufacture is not constant.

Under conditions where the amount of work done by the asset is fairly constant day in and day out, the Straight Line Method, the

Output Method and the Service Hours Method would all arrive at approximately the same result.

6. The Sinking Fund Method

The Sinking Fund Method is another method that calls for a mathematical formula. Briefly, the problem here is to determine what fixed amount it would be necessary to set aside at the end of each period, in order to have, at the end of the service life of the asset, the original cost of the asset, less its estimated scrap value, assuming that the amounts periodically set aside accumulated compound interest at a given rate. The amount of depreciation for any period would then be considered as the fixed amount plus the interest accumulated during that period. As the interest keeps compounding and is computed on an ever increasing amount of principal, the amount of depreciation becomes larger for each successive period under this method.

The foregoing must not be construed to mean that, when the sinking fund method of calculating depreciation is used, a fixed amount of cash must actually be deposited at the end of each period in a bank and allowed to accumulate compound interest. This may or may not be done. Whether a fixed sum is deposited periodically or not, makes no difference. The depreciation charge is computed to equal a fixed amount plus an ever increasing amount, representing the periodical interest accumulations that would result if a fixed amount were set aside at the end of regular periods and allowed to accumulate compound interest at a given rate.

If you should put $100 in a savings bank at the end of each year for ten years, and the bank allowed four per cent interest annually, you would, at the end of ten years, have to your credit $1,200.61. This figure can be obtained by reference to published "annuity" tables. The $100 periodically deposited would be referred to as an "annuity". But supposing that all you knew was that you would like to have $1,200.61 in the bank at the end of ten

years, how would you find out what amount you should deposit yearly in order to accumulate, with the aid of compound interest at 4%, $1,200.61? Here, then, is the problem of the sinking fund method. The $1,200.61 corresponds to the cost of the asset to be depreciated, less its possible scrap value. Ten years is the estimated life. The rate of interest may be any reasonable rate that you wish to take. Now, how do you find that fixed amount to be deposited annually? This fixed amount which, if deposited at the end of each year and compounded at a certain given interest rate, will equal a given amount at the end of a given length of time, may be found by the use of published annuity tables.

7. Comparison of Results of Different Methods of Calculating Depreciation

Following is a table showing the amount of depreciation that would be charged according to the particular method chosen to calculate it, assuming the original cost of the asset to be $1,000, its estimated life five years, and its residual or scrap value $50, making $950 to be distributed over five years.

Year	Diminishing Value	Expected Life	Straight Line	Sinking Fund @ 5%	Output	Service Hours
First	$450.70	$316.67	$190.00	$171.93	$475.00	$237.50
Second	247.57	253.33	190.00	180.52	59.38	79.17
Third	135.99	190.00	190.00	189.54	237.50	395.83
Fourth	74.70	126.67	190.00	199.03	118.75	79.17
Fifth	41.03	63.33	190.00	208.98	59.37	158.33
	$949.99	$950.00	$950.00	$950.00	$950.00	$950.00

In the "Diminishing Value" method there is a slight error of one cent. The percentage used in this case was found by finding the fifth root of 5/100 (which is $50 divided by $1,000). By the aid of logarithms, this fifth root was found to be .5493. This subtracted from 1, gave the required percentage, namely 45.07%.

In the case of the output method, it was assumed that 1/2 of the total output of which the asset was capable, was produced the first year; 1/16 the second year; 1/4 the third year; 1/8 the fourth year, and 1/16 the last year.

In the case of the service hours method, it was assumed that the asset had a life of 12,000 working hours and that it was operated as follows:

Year	Service Hours	Per Cent of Total
First	3,000	25 %
Second	1,000	8⅓
Third	5,000	41⅔
Fourth	1,000	8⅓
Fifth	2,000	16⅔
Total	12,000	100 %

From the foregoing comparative table, it is easy to see that the "Diminishing Value" and "Expected Life" methods result in a lesser charge for depreciation each period, which offsets to a certain extent the greater charge for repairs. The Straight Line method equalizes the depeciation. The Sinking Fund method provides an ever increasing charge for depreciation, which makes the book entry correspond with the fact that depreciation does actually increase as time goes on. The Output and Service Hours methods may result in varying charges for depreciation, depending upon circumstances.

The various methods outlined above are mere devices worked out to try to obtain some consistent way to calculate the amount of depreciation. It must be remembered, however, that depreciation itself goes on, regardless of any one or all of the methods used to estimate the amount.

As a matter of fact, we venture to say that the great majority of business men use the Straight Line method of calculating depreciation, for one reason because it is the simplest method, and for another reason because depreciation can only be estimated anyway.

One thing is certain, and that is that assets do not depreciate to accommodate interest tables. The Sinking Fund method is based on a mathematical formula for computing the estimate of depreciation. This method may, or may not, give as accurate results as an arbitrary guess. In our opinion, the Sinking Fund method of computing depreciation may be classed as theoretical theory, as contrasted with practical theory. In this opinion we believe we are supported by practical accountants and business men who are constantly striving to make accounting simpler rather than more complicated.

8. The Dominating Cause of Depreciation Must be the One Considered

In passing judgment on the best method of calculating depreciation, the accountant must be governed largely by circumstances in particular cases. He must also remember that if two or more causes of depreciation are at work, he must give consideration to the dominating cause. For example, if an asset is subject to both physical deterioration and obsolescence, the matter of obsolescence may be disregarded if the asset is likely to wear out before it becomes obsolete.

9. Financing Depreciation

The matter of providing funds to purchase new equipment when the old wears out, is a matter entirely apart from depreciation, except that the charge for depreciation is a safeguard against spending profits before a deduction for depreciation is made. The charge for depreciation does not make it certain, however, that the business will be in a position to buy new equipment, when the old

wears out, for the simple reason that the profits reserved for the purpose may have been diverted and invested in some other way. The business must be in a cash position to make the purchase when the purchase becomes necessary, whether it sets aside *all* of the cash necessary the first year, or the last year, or by easy stages during the service life of the asset; or it may not set aside any cash at all, and be able to borrow the whole amount, when the time comes for making replacements.

10. Depreciation Rates

Various engineers have published from time to time their ideas of depreciation rates, but these rates vary according to circumstances. The government, while it allows depreciation as a deduction in the income tax report, does not attempt to set up standards. If a reported rate does not seem fair to the government in any particular case, it may call upon the business using the rate to justify its use. Certain rates, however, the government appears to accept as standard, such as, for instance, 10% on furniture and fixtures. Certain income tax services have compiled from judicial decisions and from published opinions of engineers, a list of rates of depreciation which are considered by expert testimony to be properly applicable to all kinds and descriptions of depreciable assets. Such data should be helpful to an auditor, as well as to business men called upon to make returns to the government.

QUESTIONS

Lesson 25

1. Mention six methods of computing depreciation, and state under what circumstances you would choose each of the six methods. This question is a modification of a question on Theory of Accounts asked in the January, 1922, New York State C. P. A. Examination as follows:

> "Mention at least two theories for the determination of depreciation. State what method you favor, giving reasons for favoring it."

2. Describe briefly *how* the amount of depreciation for a year is computed by each of the six methods you may mention in answer to Question 1.

3. Explain clearly the distinction between financing depreciation and the theory of the charge to expenses for depreciation.

4. Illustrate how the provision for depreciation accounts (or the reserve for depreciation accounts, as they are perhaps better known) are preferably shown on the balance sheet.

5. In preparing examination questions, examiners often purposely leave out one of several factors which enter into the solution of a problem. They do this in order to test the student's alertness as well as his knowledge of the subject, the student not being able to supply the missing factor unless he is familiar with all the factors.

Examples of such questions are Questions 9 and 10 of Lesson 1, of this course, Question 6 of Lesson 6, and Question 6 of Lesson 23. In such problems what method would you use to find the missing factor? Explain and illustrate your answer.

LESSON 26

RECORDING DEPRECIATION AND LOSSES ON ACCOUNT OF BAD DEBTS

1. Reasons for Segregating Depreciable Assets

In Section 6 of Lesson 16, it was stated that it is the accounting practice to segregate depreciable assets, even of the same general classification, into separate accounts, more or less according to the rate at which they depreciate. This is done, for one reason, to facilitate the calculation of depreciation. When a business has few individual assets and when these seldom change, it may not be difficult to compute depreciation directly from general ledger balances, but when new assets are being constantly acquired and old ones sold or abandoned, it would appear to be easier to calculate depreciation on each individual asset, and add the results to obtain the total depreciation of the plant. This is especially true if the plant is expanding, which means that while some new assets are acquired to replace old ones, others are acquired to meet the demands of increased business, and consequently all new assets cannot be said to replace old ones. However, some plants, at least those that are not expanding, consider that in the long run the purchases of new equipment offset the abandonment of the old and compute depreciation on their "average" investment in fixed assets as reflected by the general ledger accounts; which has the advantage of being easier than computing depreciation on each new asset from the time it was acquired until the end of the accounting period and on each abandoned asset from the beginning of the accounting period until the date it was scrapped.

Let us assume that a concern owns some wooden buildings that depreciate at the rate of five per cent per annum; some brick buildings that depreciate at the rate of two and one-half per cent; some standard machines that depreciate at the rate of fifteen per

cent; some special machines that depreciate at the rate of twenty per cent; and office furniture and fixtures that depreciate at the rate of ten per cent. There should, under ordinary circumstances, be ledger accounts as follows:

Wooden Buildings;
Brick Buildings;
Standard Machinery;
Special Machinery; and
Office Furniture and Fixtures

to show the total amount invested in each group. In connection therewith there should be corresponding "Provision for Depreciation" accounts as follows:

Provision for Depreciation of Wooden Buildings;
Provision for Depreciation of Brick Buildings;
Provision for Depreciation of Standard Machinery;
Provision for Depreciation of Special Machinery; and
Provision for Depreciation of Office Furniture and Fixtures

to record the accumulated depreciation of each group.

The accounts kept to register the depreciation are almost always referred to as "Reserves for Depreciation", but we are using the word "Provision" in order to save the word "Reserve" for the *true* reserve accounts to be explained later.

Now let us suppose that these aforementioned ledger accounts showed balances at the beginning and at the end of the accounting period as follows:

	Jan. 1	Dec. 31
Wooden Buildings	$15,000	$15,000
Brick Buildings	20,000	20,000
Standard Machinery	18,000	14,000
Special Machinery	5,000	9,000
Office Furniture and Fixtures	4,000	4,200

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If there were no changes in the Wooden Buildings or Brick Buildings accounts during the year, the accountant might easily compute depreciation on them as follows:

Wooden Buildings	$750	(5 % of $15,000)
Brick Buildings	500	(2½ of 20,000)

The fact that the balances of these accounts were the same at the beginning and at the end of the period does not prove that there were no changes in the accounts, because debits for the year may have been exactly offset by credits.

We will further assume, for the sake of illustration, that an examination of the Standard Machinery account showed the following debits and credits for the year to account for the decrease of $4,000:

March	1	Purchase of two new machines, costing........	$ 8,000
July	1	Scrapping of four machines, costing.............	12,000
		Net decrease	$ 4,000

Obviously, if we took the balance of the Standard Machinery account at either the beginning or the end of the accounting period as the principal sum upon which to apply the depreciation rate, the results would not be accurate, because of the changes during the year. Practically however, if the changes are immaterial, depreciation is often computed on the balance at the beginning of the period, which means that no depreciation is computed on new purchases and that depreciation for the whole period is computed on individual assets scrapped or sold during the period, but in the long run the one error may offset the other. Then again, since the depreciation rate is only an estimate, at best, there is no good reason ordinarily, for computing the amount with minute accuracy. As a matter of fact, in a normal going concern that is not expanding, there are few marked changes during the year in the amount of capital invested in fixed assets.

Going back to the Standard Machinery account which showed a net decrease of $4,000 for the year, depreciation in that case, if computed from the general ledger account, should, strictly speaking, be computed as follows:

Jan. 1 to Mar. 1....	2 months on	$18,000	@	15%....	$	450
Mar. 1 to July 1....	4 " "	26,000	@	15		1,300
July 1 to Dec. 31....	6 " "	14,000	@	15		1,050
	Total	....				$2,800

This gives a depreciation of $2,800 for the year, compared with $2,700, if it had been computed as 15% of $18,000, the balance of the account at the beginning of the year. A similar procedure should be followed in connection with Special Machinery and Furniture and Fixtures accounts.

From the foregoing it can be seen how complicated the computing of depreciation might become, particularly by the "Percentage of Diminishing Value" and the "Sinking Fund" methods, if there were many changes in the asset accounts during each accounting period and the attempt were made to use general ledger accounts as the bases of the calculations.

2. Detailed Records Controlled by General Ledger Accounts

Now let us examine the system of keeping a detailed record of individual fixed assets, a system that has much to commend it. Accounting is essentially a science of handling detail. You will find that "detail" is demanded on every hand. Almost every summary figure which you will ever have occasion to report should be "supported" in your working papers by the items that make it up. A good accountant, however, while he knows the necessity of detail, does not allow himself to get lost in it, but uses it merely for "reference purposes".

The detailed record of fixed assets accounts might consist of a card (or similar record) for each fixed asset, arranged in groups to correspond with the general ledger accounts. For example, if there were ten standard machines in the plant, there would be ten cards, and each card might show, among other things, the date when the machine was acquired, its location in the plant, its purchase price, and the amounts periodically computed against it as depreciation. In that event, the sum of the purchase prices shown on the ten cards should equal the balance of Standard Machines account in the general ledger, and the sum of the amounts shown on the ten cards for depreciation, should equal the balance of the "Provision for Depreciation of Standard Machines" account.

The individual cards in any group would usually show different purchase prices and different amounts of depreciation, the purchase price of the asset represented by the card naturally depending upon the type of the asset acquired, and sometimes upon the date of its acquisition, and the amount of depreciation depending upon the cost of the asset, the rate of depreciation, and the length of time it had been in service. As soon as an asset is abandoned its card should be removed from the file.

In short, each group asset account in the general ledger would be the controlling account in respect to purchase prices for the cards in its particular group, and in a similar manner the corresponding "Provision for Depreciation" account would be the controlling account in respect to the amounts shown as depreciation on these same cards. Following is an illustration of a card that might be used:

EQUIPMENT RECORD					
Description			Number		
Type			Serial		
Date Purchased			Accession		
Cost			Location		
Purchase Price $....................			....		
Transportation			....		
Installation			....		
....			Estimated Life		
Total $....................			Depreciation Rate		
Date	Amount	Accu-mulated	Date	Amount	Accu-mulated

Let us assume that a list or "trial balance" compiled from these cards, showed the following amounts (these figures having no connection with any figures previously used).

Wooden Buildings	Purchase Price	Accumulated Depreciation
No. 1....................................	$10,000	$3,000
No. 2....................................	12,000	3,600
Total...........	$22,000	$6,600

Brick Buildings

No. 1	$16,000	$ 480
No. 2	18,000	1,620
No. 3	9,000	450
Total	$43,000	$2,550

Standard Machines

No. 1	$ 8,000	$ 1,200
No. 2	7,500	1,125
No. 3	8,000	1,200
No. 4	8,200	3,690
No. 5	8,000	6,000
No. 6	8,000	2,400
No. 7	7,700	1,155
No. 8	8,000	1,200
No. 9	8,350	2,605
No. 10	8,000	1,200
Total	$79,750	$21,775

Special Machines

No. 1	$10,500	$ 2,100
No. 2	8,600	3,420
No. 3	12,700	7,620
No. 4	9,000	1,350
Total	$40,800	$14,490

Office Furniture and Fixtures

Desk No. 1	$ 80	$ 24
" No. 2	75	45
Typewriter No. 1874	150	75
Etc.	1,600	150
Total	$1,905	$294

The balances of the corresponding general ledger accounts, if the cards were under control, would be as follows:

	Debit	Credit
Wooden Buildings	$ 22,000	
Brick Buildings	43,000	
Standard Machines	79,750	
Special Machines	40,800	
Office Furniture and Fixtures	1,905	
Provision for Depreciation of Wooden Buildings		$ 6,600
Provision for Depreciation of Brick Buildings		2,550
Provision for Depreciation of Standard Machines		21,775
Provision for Depreciation of Special Machines		14,490
Provision for Depreciation of Office Furniture and Fixtures		294
Total	$187,455	$45,709

3. Depreciation Deducted from Asset Accounts on Balance Sheet

Above are shown total depreciable fixed assets of $187,455,

against which provision for depreciation had been made to the amount of $45,709. The property accounts section of the balance sheet, therefore, might appear as follows:

Property:

Wooden Buildings	$22,000	
Less Depreciation	6,600	
		$ 15,400
Brick Buildings	43,000	
Less Depreciation	2,550	
		40,450
Standard Machines	79,750	
Less Depreciation	21,775	
		57,975
Special Machines	40,800	
Less Depreciation	14,490	
		26,310
Office Furniture and Fixtures	1,905	
Less Depreciation	294	
		1,611
Total Property		$141,746

Or if it was not desirable to show so much detail on the balance sheet, the value of the buildings could be combined and the depreciation against them likewise. Similarly the values of the two classes of machinery could be combined and the depreciation against them likewise.

The foregoing is included merely to show how "Provision for Depreciation" accounts are now generally treated on the balance sheet. Formerly it was the general practice to list them on the liabilities side under the head of "Reserves for Depreciation", instead of as deductions from the asset accounts.

4. Journal Entries for Depreciation

In regard to the periodical journal entry for depreciation, it should be made substantially in the following form, the figures used being for illustrative purposes only and having no connection with any figures used elsewhere:

Depreciation of Office Furniture and Fixtures	$ 500	
Depreciation of Plant..........................	19,000	
Provision for Depreciation of Wooden Buildings		$9,000
Provision for Depreciation of Brick Buildings		4,000
Provision for Depreciation of Standard Machinery		1,000
Provision for Depreciation of Special Machinery		5,000
Provision for Depreciation of Office Furniture and Fixtures....		500
To record the depreciation of the above mentioned assets for the year ended December 31, 1921.		

Notice in connection with the foregoing entry that "Depreciation of Office Furniture and Fixtures" account and "Depreciation of Plant" account are both expense accounts, the former being an item of general expense and the latter an item of factory expense. If it were not for the classification of expense accounts, depreciation of all assets could be charged to one Depreciation account. In other words, the expense accounts for depreciation do not follow the detailed classification of the fixed asset accounts, but rather they are in accordance with expense classification, namely, factory expense (for depreciation of plant assets) and general expense (for depreciation of assets used by the general office). In addition there might be a separate depreciation expense account for the depreci-

ation of assets used in the promotion of sales, and this would be a selling expense.

5. Depreciation Not Usually Credited to Asset Accounts

You will notice further that the amounts charged to depreciation expense accounts are not credited to the accounts representing the assets depreciated, but to the corresponding "Provision for Depreciation" accounts. The reasons for this accounting procedure have already been mentioned, but we will review and amplify them here. The asset account is not credited periodically with depreciation, since that method would keep reducing the balance of the asset account, whereas it is considered advisable to have the balance always represent the original cost price of all the assets included in that group which are still in service. This statement may confuse you if you have been thinking that under the "Percentage of Diminishing Value" method of calculating depreciation, the amount of depreciation is periodically credited in the ledger account to reduce its balance. But this is not necessarily, nor even usually, true. The amounts of depreciation are usually recorded in separate ledger depreciation accounts independent of the ledger asset accounts.

Referring to the "Provision for Depreciation" accounts, these measure the total amount provided as depreciation against the various fixed assets owned by the business at any given date. They give some idea of the adequacy or inadequacy of the provision. Then in the preparation of the balance sheet, if the Provision for Depreciation account is shown as a deduction from the balance of the corresponding asset account, the net result will be the same as if depreciation had actually been credited to the asset account on the books.

The credit side of the Provision for Depreciation account may be thought of as the credit side of the asset account. For that reason it should follow the corresponding asset account in the

general ledger. Although it shows a credit balance, it is, in the true sense of the word, not a liability account and therefore has no proper place among the liability accounts. It is merely an offset to, or a deduction from, an asset account.

6. Figures for Journal Entry May be Prepared from Detailed Records

If a card detailed record of each depreciable asset is kept, the journal entry for depreciation can be prepared therefrom by totaling the amounts of depreciation as shown on each card.

7. Detailed Records Facilitate Physical Control Over Assets

Another advantage of the card system, which has nothing to do with depreciation, however, but which it may be well to mention here, is that it facilitates the taking of an inventory, and is a partial safeguard against the loss of moveable assets. This is particularly true in the case of furniture and fixtures. Many business houses attach a numbered brass tag to all articles of office equipment as soon as they are received, and indicate these numbers on the detailed records. This practice makes it easier to account for the individual pieces in the taking of an inventory later, especially when there are numerous articles of furniture or equipment of the same general description to be accounted for, such as chairs, tables, desks, typewriters, and filing cabinets.

8. Entries to Record the Abandonment of an Asset

Now we come to the question as to what entries should be made when any individual asset is disposed of. Theoretically, when it comes time to abandon the asset, the amount that has been charged to depreciation on account of that asset should equal its original cost, less scrap value, but this is seldom the case.

For example, if a standard machine originally cost $5,000, and

if the amount of depreciation accumulated against it at the time when it was abandoned was $4,800, its scrap value should be $200. If this were found to be the case, the entry should be as follows:

Abandoned Machinery—Scrap Value....	$ 200	
Provision for Depreciation......................	4,800	
Standard Machines		$5,000

The second item ($4,800) takes out of the Provision for Depreciation account the amount of depreciation accrued on the particular asset abandoned, while the third item ($5,000) takes out of Standard Machines account its original cost price. Thus it will be seen how Standard Machines account, and other similar accounts, represent at all times the original cost of the assets in use, because as soon as the asset is sold or abandoned, its original cost price is deducted from the asset account by a credit thereto.

Some accountants consider that if depreciation, computed at the usual rate on the asset up to the date of its sale or abandonment, is deducted from the original cost of the asset and the remainder is greater than the selling price of the asset (assuming an immediate sale for the abandoned asset), there would be a loss on the sale; vice versa, a profit. In most cases it would seem, however, that the probable life or the scrap value, or both, had, on the contrary, been over or under estimated, and consequently that the depreciation expense account had been under or over charged during the time the asset was in service. It would, therefore, appear in order to charge or credit depreciation expense account, as an adjustment of the error, rather than to reflect in the statement of income and profit and loss a loss or profit on the sale of scrapped assets. It rarely happens that an asset which must be sold as "second-hand" will bring its cost price, even though it has never been used. Therefore it seems unreasonable to suppose that a second-hand asset that is almost worn out can be sold at a profit. We take the view, rather, that the sales price of such an asset determines the *true* scrap value, and that any errors in forecasting scrap values should be adjusted through the depreciation expense account. If no sale

is in prospect, on the other hand, an estimated amount must be taken as scrap value, according to market conditions at the time of abandonment.

If this theory is followed, the procedure, when a depreciable asset is abandoned or sold, would be as follows:

(1) Accumulate the depreciation of the asset to the date of its sale or abandonment at the rate regularly used.

(2) Deduct the amount of depreciation thus obtained from the original cost price, which will give a certain remainder.

(3) If the asset is sold for, or is estimated to be worth less than this remainder, *increase* the final charge for depreciation so as to make the remainder equal the selling price or the estimated value of the asset.

(4) If the asset is sold for, or is estimated to be worth more than this remainder, *reduce* the final charge for depreciation accordingly.

(5) Make journal entries similar to those shown on pages 15 and 16 of this lesson.

(6) If this "adjustment" of the depreciation charge makes the final depreciation charge very materially out of alignment with the charges in previous accounting periods, it may be charged or credited to Profit and Loss account or to a special account, which may be called "Depreciation Adjustment" account; otherwise there is no valid reason why it should not be absorbed in the final charge for depreciation.

To illustrate, suppose Machine No. 1, acquired on January 1, 1910, for $10,000, had been regularly depreciated each year, at the rate of 10% per annum. On July 1, 1919, it was sold for $600. Up to January 1, 1919, the accrued depreciation was 90%, or $9,000. Six months additional accrual at ten per cent per annum would bring the total accrued depreciation up to $9,500, giving a

net book value to the asset on that date of $500. It was actually sold for $600. Therefore the final depreciation charge in 1919 should be "adjusted" from $500 to $400. The entries would therefore be substantially as follows:

JULY 1, 1919

	Debit	Credit
Depreciation	$ 400.00	
Provision for Depreciation of Machines		$ 400.00
For depreciation of Machine No. 1, for six months at 10% per annum, with an adjustment to conform with actual residual value. A depreciation of $500 (5% of $10,000) would bring the accrued depreciation on this asset to $9,500, leaving a net book value of $500, but as the actual selling price on July 1, 1919, was $600, the depreciation is reduced $100 to adjust.		
Cash (or Account Receivable)......	600.00	
Machinery Account		600.00
For sale of Machine No. 1.		
Provision for Depreciation of Machines	9,400.00	
Machinery Account		9,400.00
To write off the original cost of Machine No. 1, ($10,000.00) less residual value of $600. This machine was sold today.		

If, on the other hand, the machine were sold for $200, the entries would be as follows (explanations omitted):

Depreciation	$ 800.00	
Provision for Depreciation of Machines		$ 800.00
Cash (or Account Receivable)......	200.00	
Machinery Account		200.00
Provision for Depreciation of Machines	9,800.00	
Machinery Account		9,800.00

The ledger accounts showing the postings of the periodical entries for depreciation expense, and of the entries in connection with the abandonment of one or more depreciable assets, might, as an illustration, appear as follows, assuming the purchase of machines to have been on the first day of the month in each case, so as to make the calculations of depreciation easier. The depreciation rate is assumed to be ten per cent per annum.

MACHINERY ACCOUNT

Date	Particulars	Amount	Date	Particulars	Amount
1908			1916		
Jan. 1	Machine No. 1....$	4,920.00	Sept. 1	No. 1 sold, cash..$	800.00
Mar. 1	" " 2....	5,600.00	" 1	Provision for Depreciation	4,120.00
1912					
Jan. 1	" " 3....	4,500.00	1917		
Aug. 1	" " 4....	4,800.00	Feb. 1	No. 2 abandoned Estimated scrap value	100.00
1916					
Feb. 1	" " 5....	5,800.00		Provision for Depreciation......	4,993.33
1917				Profit and Loss....	506.67
Sept. 1	" " 6....	5,600.00			
1921					
July 1	" " 7....	5,000.00	1921		

			Dec. 1	No. 7 destroyed by accident. Provision for Depreciation......	208.33
				Profit and Loss....	4,791.67
			Dec. 31	No. 3 sold, cash..	425.00
				Provision for Depreciation......	4,075.00
				Balance Down....	16,200.00
	Total................	$36,220.00		Total................	$36,220.00
1922					
Jan. 1	Balance................	$16,200.00			

Machine No.	Service Life	Accumulated Depreciation
1	8 yrs., 8 months	86⅔%
2	8 " 11 "	89⅙ %
7	5 "	4⅙ %
3	10 " 0 "	100 %

PROVISION FOR DEPRECIATION OF MACHINERY

1916			1908		
Sept. 1	Depreciation accrued on Machine No. 1........	$ 4,120.00	Dec. 31	Dep. Expense......	$ 958.67
			1909		
			Dec. 31	"	1,052.00
1917			1910		
Feb. 1	Depreciation accrued on Machine No. 2........	4,993.33	Dec. 31	"	1,052.00
			1911		
			Dec. 31	"	1,052.00
1921			1912		
Dec. 1	Depreciation accrued on Machine No. 7........	208.33	Dec. 31	"	1,702.00
			1913		
			Dec. 31	"	1,982.00
Dec. 31	Depreciation accrued on Machine No. 3........	4,075.00	1914		
			Dec. 31	"	1,982.00
			1915		
	Balance Down....	10,378.34	Dec. 31	"	1,982.00

Date		Amount	Date		Amount
			1916		
			Dec. 31	"	2,205.67
			1917		
			Dec. 31	"	1,743.33
			1918		
			Dec. 31	"	2,070.00
			1919		
			Dec. 31	"	2,070.00
			1920		
			Dec. 31	"	2,070.00
			1921		
			Dec. 31	"	1,853.33
	Total	$23,775.00		Total	$23,775.00
			1922		
			Jan. 1	Balance Down	$10,378.34

DEPRECIATION EXPENSE

Date		Amount	Date		Amount
1908			1908		
Dec. 31	Prov. for Dep.	$ 958.67	Dec. 31	P. & L.	$ 958.67
1909			1909		
Dec. 31	"	1,052.00	Dec. 31	"	1,052.00
1910			1910		
Dec. 31	"	1,052.00	Dec. 31	"	1,052.00
1911			1911		
Dec. 31	"	1,052.00	Dec. 31	"	1,052.00
1912			1912		
Dec. 31	"	1,702.00	Dec. 31	"	1,702.00
1913			1913		
Dec. 31	"	1,982.00	Dec. 31	"	1,982.00
1914			1914		
Dec. 31	"	1,982.00	Dec. 31	"	1,982.00
1915			1915		
Dec. 31	"	1,982.00	Dec. 31	"	1,982.00
1916			1916		
Dec. 31	"	2,205.67	Dec. 31	"	2,205.67
1917			1917		
Dec. 31	"	1,743.33	Dec. 31	"	1,743.33

1918			1918		
Dec. 31	"	.... 2,070.00	Dec. 31	"	.... 2,070.00
1919			1919		
Dec. 31	"	.... 2,070.00	Dec. 31	"	.... 2,070.00
1920			1920		
Dec. 31	"	.... 2,070.00	Dec. 31	"	.... 2,070.00
1921			1921		
Dec. 31	"	.... 1,853.33	Dec. 31	"	.... 1,853.33

PROFIT AND LOSS

1908			
Dec. 31	Dep. Expense......$	958.67	
1909			
Dec. 31	"	1,052.00	
1910			
Dec. 31	"	1,052.00	
1911			
Dec. 31	"	1,052.00	
	etc., etc.		
1917			
Feb. 1	Loss due to underestimating depreciation on Machine No. 2........	506.67	
1921			
Dec. 1	Loss due to accident to Machine No. 7	4,791.67	

An extraordinary adjustment of depreciation, due to having made a substantial error in forecasting either the life or the scrap value of an asset, may be charged or credited to Profit and Loss directly instead of to Depreciation (expense) account, or if preferred to an account called "Adjustment of Depreciation", which would at the end of the accounting period be closed out to Profit and Loss the same as Depreciation (expense) account. The object of not charging nor crediting extraordinary adjustments of depreciation to Depreciation (expense) account itself, would be to avoid having that account show wide variations. There would be no

particular reason for opening an account called "Adjustment of Depreciation" unless there should chance to be several adjusting items of considerable size. In this case it would be useful as a means of accumulating the items in order to carry them in one total to Profit and Loss account at the end of the accounting period.

Extraordinary losses due to premature retirement of assets because of casualties, or for other reasons, should be charged to Profit and Loss, unless special provision in the way of a "Reserve for Contingencies" has been made for such contingencies, in which case they should be charged to that reserve. There will usually not be many such charges, at least it is to be hoped there will not be.

The amounts of depreciation shown in the foregoing accounts were taken from the following table:

		MACHINES						
Year	Total	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
1908	958.67	492.00	466.67					
1909	1,052.00	492.00	560.00					
1910	1,052.00	492.00	560.00					
1911	1,052.00	492.00	560.00					
1912	1,702.00	492.00	560.00	450.00	200.00			
1913	1,982.00	492.00	560.00	450.00	480.00			
1914	1,982.00	492.00	560.00	450.00	480.00			
1915	1,982.00	492.00	560.00	450.00	480.00			
1916	2,205.67	184.00	560.00	450.00	480.00	531.67		
1917	1,743.33		46.66	450.00	480.00	580.00	186.67	
1918	2,070.00			450.00	480.00	580.00	560.00	
1919	2,070.00			450.00	480.00	580.00	560.00	
1920	2,070.00			450.00	480.00	580.00	560.00	
1921	1,853.33			25.00	480.00	580.00	560.00	208.33
Total	23,775.00	4,120.00	4,993.33	4,075.00	4,520.00	3,431.67	2,426.67	208.33
Sold for cash or estimated scrap value		800.00	100.00	425.00				

Charged to Profit and Loss		506.67		4,791.67
Total Cost of Machine	4,920.00	5,600.00	4,500.00	5,000.00

In respect to the foregoing, the following points should be observed:

(1) The amount of depreciation expense for each year is the total of the amounts computed on each machine for the number of months it was in service during the year, the rate of depreciation being assumed to be 10% per annum. Thus for 1908 the depreciation was $958.67 calculated as follows:

Machine No. 1..(costing $4,920.00) 1 year........	$492.00
Machine No. 2..(costing 5,600.00) 10 months....	466.67
Total...	$958.67

These figures could easily be obtained from individual cards, if the card system were used.

(2) The journal entry for the above would be substantially as follows:

Depreciation (Expense)	$958.67	
Provision for Depreciation............		$958.67
For yearly depreciation charge (giving details shown above).		

This would be followed by another journal entry as follows:

Profit and Loss......................................	$958.67	
Depreciation (Expense)		$958.67

To close the latter into the former account (the Depreciation (expense) account is closed into Profit and Loss just as any other nominal account is closed at the end of the accounting period).

In case entries were made monthly or semi-annually, the figures would be altered accordingly.

(3) The cost price of each machine disposed of is credited to Machinery account, thus relieving Machinery account of the exact amount with which it was originally debited. For example, Machine No. 1, costing $4,920.00 on Jan. 1, 1908, was sold on Sept. 1, 1916 for $800.00. Therefore Machinery account was credited with $4,920.00 and two accounts were charged as follows:

Cash (for cash received)	$ 800.00
Provision for Depreciation (for total of amounts which up to that time had been credited to "Provision for Depreciation" account on account of Machine No. 1)	4,120.00
Total	$4,920.00

It has been stated before that the amounts charged to Depreciation (expense) account are credited to an account called Provision for Depreciation, or Reserve for Depreciation, instead of to the asset account. But at the time the asset is abandoned, the amount of depreciation that has accumulated in the "reserve" account, is transferred back to the asset account, where (theoretically) it should have been credited in the first place. That is one way of looking at it. Another way of looking at it is to con-

sider the cost of the asset, less residual value, as "written off" against the reserve account, upon sale or abandonment.

Machine No. 2 was not sold. It was merely set aside at February 1, 1917, and the scrap value was estimated to be $100. The depreciation accumulated to that date was $4,993.33, but that was not enough to "write off" the total cost of the machine. It fell short by $506.67, owing to the failure to estimate correctly the depreciation. But rather than have the final year stand an extra charge of $506.67, as depreciation adjustment, the amount was charged to Profit and Loss.

The fact that abandoned machines have been credited to Machinery account at cost, can be proved by totaling the cost price of the machines still in use at December 31, 1921. It will be noticed that the total agrees with the balance of Machinery account as follows:

Machine No. 4	$ 4,800
" " 5	5,800
" " 6	5,600
Balance of account	$16,200

(4) Similarly the balance of Provision for Depreciation of Machinery Account, should represent the depreciation accumulated at December 31, 1921, on the machines still in use. And so it does, as may be proved by the following (refer to pages Nos. 17 and 18 of this lesson):

Machine No.	Time in Service	Cost	Depreciation
4	9 yrs., 5 months	$4,800.00	$ 4,520.00
5	5 " 11 "	5,800.00	3,431.67
6	4 " 4 "	5,600.00	2,426.67
		Total	$10,378.34

(5) Referring to the detail of depreciation amounts shown on page 20 of this lesson, notice that the amount of depreciation on Machine No. 1 for eight months in 1916 calculated at 10% on $4,920.00, amounted to $328.00. This amount plus previous depreciation ($3,936.00) plus the cash received ($800.00) made a total of $5,064.00 which exceeded the original cost of the asset ($4,920.00) by $144.00. Therefore the final depreciation charge was decreased by $144.00 to $184.00 to take care of the excess, which was not considered large enough to credit directly to Profit and Loss account.

9. Provision for Uncollectible Accounts

Another example of a "valuation" account is found in the account called "Provision for Uncollectible Accounts", which, however, is generally referred to as "Reserve for Doubtful Accounts" or "Reserve for Uncollectible Accounts", or "Reserve for Bad Debts". This account is handled in a similar way as the Provision for Depreciation account.

In order that each accounting period may be charged with the proportion of loss due to uncollectible customers' accounts, an entry is usually made at the end of the accounting period, charging "Uncollectible Accounts" (an expense account) or "Bad Debts", if that name is preferred, and crediting "Provision for Uncollectible Accounts" with an estimated amount, which it is considered will ultimately be uncollectible from the sales made during the period. This figure is generally obtained by taking a certain percentage of the sales, on the theory, fortified usually by experience, that a certain percentage of every hundred dollars' worth of goods sold will never be collected. Then when an account is found, through law suit or in any other way, to be uncollectible, it is written off against the reserve just as an abandoned fixed asset is written off against the reserve for depreciation.

The balance in the "Provision for Uncollectible Accounts" account should (theoretically) equal at any given time the amount included in customers' accounts that cannot be collected. Therefore the reserve account is deducted from the balance of customers' controlling account, on the balance sheet, in order to arrive as nearly as possible at the real asset value of customers' accounts.

It can be plainly seen that it would hardly do to credit an individual customer's account with an estimated amount which it is believed he will not pay, especially when statements are rendered to him periodically. Therefore the amounts are credited to the "reserve" account, and when the time comes to actually write off the account as uncollectible, the customer's account is credited and the reserve account charged.

While this accounting procedure is adopted to provide a more equitable distribution of expense for uncollectible accounts over the various accounting periods, the government, prior to the law of 1921, did not allow a business to include such an expense as a deduction from gross income on the income tax return unless, and until, the account was actually written off.

Whatever may be the method of calculating the periodical charges to "Uncollectible Accounts" account and the corresponding credit to "Provision for Uncollectible Accounts" account, whether it is computed as a certain percentage of the sales for the period, or whether an arbitrary estimate is taken, the "Provision for Uncollectible Accounts" account should be checked occasionally to see that the provision is adequate. This can be done by a careful examination of each customer's account, and listing the balances which appear bad, or doubtful of collection.

An outside auditor doing this work would be guided largely by the age of the accounts and by his examination of the credits appearing in the accounts. The accounts of those customers who have been in the habit of paying promptly, could be considered good. Others might be considered doubtful, still others absolutely "no

good". The credit balance of the reserve, or valuation, account should at least equal the sum of the items considered "no good", plus a certain percentage of those in the "doubtful" class.

An inside accountant usually has an advantage over an outside auditor in judging the value of customers' accounts, because he is more familiar with them. For this reason it is customary for an outside auditor (when he wishes to "check up" the reserve account) to go over the accounts with some one connected with the business who is in a position to know about the possibilities of collections.

10. Summary Review

What has been said on the subject of depreciation and uncollectible accounts may be summed up as follows:

(1) That depreciation is the measure of an asset's loss in value through use in a business.

(2) That depreciation is taken into account on the books:

- (a) In order that each accounting period may bear its proper proportion of depreciation expense.
- (b) In order that the value of depreciable assets may not be over-stated on the balance sheet.
- (c) As a safeguard against having to replace the asset at the expiration of its service life by raising additional capital.

(3) That an accountant is interested in the subject of depreciation because he should see that depreciation is properly recorded on the books; and that he should also be more or less familiar with "fair" rates of depreciation, in order to judge for himself the adequacy or inadequacy of the provision for depreciation when expert engineering advice is not available.

(4) That the provision for depreciation does not guarantee that when the asset is worn out, *cash* will be available

to purchase a new asset. It merely provides a safeguard against a withdrawal of capital from the business in the guise of a distribution of profits. Other measures must be taken to provide the necessary cash, whether cash is set aside in one amount or in periodical installments or is borrowed when needed.

(5) That the principal causes of depreciation are (a) Physical Deterioration, (b) Lapse of Time, (c) Depletion, (d) Market Declines, and (e) Accidents; but that not all of these are, strictly speaking, considered as depreciation on the books.

(6) That the two principal causes of obsolescence are (a) Inadequacy, and (b) Improvements in the Arts.

(7) That a number of methods have been devised for trying to calculate the amount of depreciation applicable to a given accounting period, but that depreciation goes on regardless of the methods used to calculate it.

(8) That the rate of depreciation of an asset actually increases as time goes on, but, notwithstanding that fact, we believe the charge should be pro-rated over the various accounting periods as nearly evenly as possible.

(9) That the principal methods of calculating depreciation are:

- (a) The Straight Line method—which pro-rates the charge evenly over periods of time.
- (b) The Percentage of Diminishing Value method—which provides a gradually decreasing charge.
- (c) The Sum of Expected Life Periods method—which also provides a gradually decreasing charge.

(d) The Sinking Fund method—which provides a gradually increasing charge.

(e) The Output method—which varies the charge according to the output.

(f) The Service Hours method—which varies the charge according to the number of hours the asset is used.

(10) That if an estimate for all repairs and renewals were added to the cost of the asset and the total pro-rated by the Straight Line method, then the Straight Line method, the Percentage of Diminishing Value method, and the Sum of Expected Life Periods method would all be approximately alike; at least they would all strive toward equalizing the burden over periods of time, which we believe is the best way if the plant is running under normal conditions.

(11) That if a plant is running in an intermittent fashion—first at considerably more than normal and then at considerably less than normal, the Output or the Service Hours methods would probably result in a more equitable distribution of the depreciation burden than any of the other methods.

(12) That the charge for depreciation is not credited to the asset account but to an account called Provision or Reserve for Depreciation, for two reasons:

(a) In order that the balance of the asset account may constantly represent the original cost of the assets still in service.

(b) In order that the Provision for Depreciation account may always show the accumulated depreciation of the assets in service.

(13) That the Provision for Depreciation accounts are not liability accounts; and that they should be deducted

from the asset accounts on the balance sheet.

(14) That a detailed record of depreciable assets is to be commended, especially if there are many such assets.

(15) That upon the abandonment of the asset the final depreciation charge should ordinarily be adjusted to make the depreciated value of the asset equal scrap value or the cash received for it. Then the asset account may be credited with an amount or amounts equal to its original cost and the corresponding Provision for Depreciation account charged with the accumulated depreciation as finally correctly adjusted.

(16) That each accounting period is usually charged a certain amount as loss on account of uncollectible accounts, the credit being to "Provision (or Reserve) for Uncollectible Accounts". This figure is generally taken as a certain percentage of the sales for the period based upon past experience. When an individual customer's account is found to be uncollectible, the balance is written off the books by charging it to the reserve account. The balance of the reserve account at any time should theoretically equal the amount included in customers' accounts that will ultimately have to be written off. Of course this amount can only be estimated, as no one knows exactly how much will be uncollectible.

QUESTIONS

Lesson 26

1. Assume that a factory started operating on January 2, 1908, with one hundred machines which were the same in every particular, and that the life of each machine averaged ten years. The factory kept growing at the rate of one hundred additional machines a year until it had acquired a thousand machines, when it reached its full development. From that time on the management adopted the policy of scrapping, as worthless, one hundred machines on January 2 of each year and of purchasing on the same day one hundred new ones to take their places, charging the cost thereof to "Factory Expense" account.

As the factory management was not familiar with the theory of depreciation, no charge for depreciation had ever been made.

If you were called in to make an audit, what adjustments, if any, would you make for a statement of income and profit and loss for the year 1921, and a balance sheet as of December 31, 1921, both of which you were asked to submit?

For this purpose assume that each machine cost $5,000 and that prices had always been uniform and that the straight line method of computing depreciation, if any, should be adopted. Explain fully your reasons for adjusting the books to give effect to depreciation or your reasons for making no adjustments at all, whichever you decide to do.

2. Why are separate accounts usually opened in the ledger for assets subject to the same rate of depreciation?

3. Explain in detail a method of obtaining, periodically, the amounts to be charged to depreciation and credited to a reserve for depreciation other than by applying rates of depreciation to ledger balances.

4. Explain the theory of the Provision or Reserve for Depreciation account.

5. Assume, for the sake of simplicity, the following facts: A business owned three machines at December 31, 1921. The balances of Machinery account and of Provision for Depreciation of Machinery account at that date amounted to $15,000.00 and $6,258.33 respectively. One machine was purchased for $8,000.00 on August 1, 1915, the second on December 1, 1918, for $3,000.00, and the third was purchased on July 1, 1921. The detail of Machinery account and of Provision for Depreciation of Machinery account was kept on cards.

Draw illustrations of three cards. Show thereon how you think each card should look as at December 31, 1921, after the bookkeeper had completed his work and had proved that the cards were in agreement with the controlling accounts. The bookkeeper used the straight line method of computing depreciation at a rate of 10% per annum. Show also the proof of the controlling accounts.

6. Prepare for the head-bookkeeper in a factory the journal entry (omitting explanations) to provide for depreciation for the year as follows, and classify the various depreciation expense accounts charged:

Assets		Rate of
Name	Value	Depreciation
Standard Machinery	$40,000.00	10%
Special Machinery	60,000.00	20%
General Office Bldg. (Wood)	25,000.00	5%
Factory Bldg. (Brick)	40,000.00	2½%
Hand Tools	8,000.00	50%
Furniture and Fixtures in General Offices	4,000.00	10%
Furniture and Fixtures in Sales Department	1,000.00	10%

7. Illustrate a machinery account which shows the posting of the following data:

July 1, 1908, Purchase of Machine No. 1....$5,000.00
Feb. 1, 1912, " " " No. 2.... 6,000.00
Aug. 1, 1912, Machine No. 1 destroyed by accident.
Dec. 31, 1921, Sale of Machine No. 2 for $100.00 cash.
Depreciation rate, 10% per annum.

8. Illustrate a provision for depreciation account.

9. Illustrate a depreciation expense account, using the same amounts of depreciation expense used in your answer to the previous question.

10. What rule governs the classification of a depreciation expense account?

11. A certain concern has been in the habit of crediting 2% of its net sales annually to a Reserve for Uncollectible accounts, and of charging off bad debts to that reserve. Explain a method of determining quickly whether the percentage used has been approximately correct.

12. How should an outside auditor proceed to determine whether a reserve for uncollectible accounts was insufficient or more than sufficient, as at a given date?

13. Make an outline of Lessons 24, 25, and 26 in accordance with the rules on how to study explained in Volume 1. Do not make an outline of each lesson separately, but consider the three lessons as one lesson.

LESSON 27

PARTNERSHIPS
DISTINCTIVE FEATURES

1. Introductory

Accounting may be said to be built around three books and three forms of organization, the three books being the cash book, the journal and the ledger, and the three forms of organization being the sole proprietorship, the partnership, and the corporation. While we have described in previous lessons the three books and their various sub-divisions, and have discussed the theory of certain representative accounts, and have explained the preparation of simple balance sheets and statements of income and profit and loss, we have up to the present confined our attention, in the main, entirely to the sole proprietorship form of organization. It is now time to begin the study of partnerships.

2. Partnership Defined

In the first lesson, a partnership was defined as a business owned by two or more persons who usually contribute capital in equal or unequal proportions and who conduct the business under a partnership agreement. This was necessarily a limited definition. More broadly defined, a partnership is an association of two or more persons who contract to combine their property, money, or skill to conduct a legally recognized business with the idea of making a profit.

3. Distinctive Features of Partnership Accounting

In stepping into partnership accounting, you will not be entering an entirely new and untried field. On the contrary, you will find there all of your old friends, such as the cash book, the journal,

and the ledger; assets, liabilities, earnings, and expenses; and balance sheets and statements of income and profit and loss.

In the last analysis, a partnership is merely the combining of two or more sole proprietorships, whether the individuals forming the partnership were previously in business or not. But the sole proprietor has only himself to think of, whereas in a partnership each partner has every other partner to consider.

The books of account must be made to do justice to all the partners, strictly in accordance with the law and with the partnership agreement. The distinctive feature, therefore, of partnership accounting lies in seeing that the financial interest of each partner in his relations with all the other partners is properly protected.

4. Some Points of Law to Remember which Affect the Accounting

In order to be sure that the books have been properly kept, however, the accountant must have some knowledge of the law. While our law lessons will treat of the subject in greater detail, we will note here a few of the essential points to remember, which have a bearing on the account keeping, as follows:

(1) There must be a partnership agreement. This may be oral or written (preferably written).

(2) The partners can agree to any conditions affecting themselves that they wish, subject only to the general laws of the land, just as our national legislators may pass laws which are not forbidden by the constitution of the United States.

(3) In the absence of provisions in the partnership agreement to the contrary, however, the law stipulates:

(a) That each partner's share in the capital of the business shall be considered equal to that of each of the other partners.

(b) That profits or losses shall be divided equally among the partners.

(c) That no partner is entitled to a salary.

(d) That interest is not to be credited on partners' capital accounts, nor charged on deficiencies of capital.

(e) That if a partner makes an advance to the firm as a loan, as distinguished from a contribution of capital, he is entitled to receive interest thereon.

5. Other Points the Law Assumes

If there are no provisions in the agreement to the contrary, the law will further assume:

(1) That all partners have an equal right in the management of the business.

(2) That the consent of all partners must be obtained before a new partner may be taken in.

(3) That the majority shall rule when differences of opinion arise as to the proper business policy, but no agreement among partners can be changed without the consent of all.

6. Partnership Agreements Should be Specific

If the partners do not wish to be bound by any of the foregoing conditions which the law reads into their agreement when the agreement is silent on the subject, they should be careful not to overlook any of these points in drawing up their partnership contract, but should specifically state therein what each partner's share in the partnership capital shall be; how profits and losses shall be divided; what salaries, if any, partners may draw; partners' duties and powers in respect to management; whether interest is to be allowed on capital contributions, or charged on deficiency of capital,

and the like. Deficiency of capital results from a partner's failure to contribute the full amount of capital he agreed to contribute, or from his having reduced his capital account through excessive drawings.

7. How Assets are Applied in Liquidating a Partnership

Upon the liquidation of a partnership, the assets of the business are applied in the following order:

(1) To pay off creditors.

(2) To pay off any loans that one or more of the partners may have made to the firm.

(3) To return to the partners their capital contributions.

If the assets are more than sufficient to do these three things, the excess is divisible among the partners in the proportion as they share profits.

If a partner is indebted to the firm on account of any transaction or transactions, the amount due from him can be deducted from what he would otherwise receive as his share of the assets.

Creditors must be paid in full before the partners are entitled to receive anything. If the assets are not sufficient to pay the creditors one hundred cents on the dollar, a pro-rata distribution is made. That is to say, each creditor would receive only a part of his claim. This would be a percentage of his whole claim, equal to the ratio of total assets to total liabilities. For example, if the total assets were $100,000, and the total amount due to all creditors was $200,000, each creditor would receive only one-half of the amount due him, provided there were no preferred claims, which the law stipulates shall be paid in full before payment can be made on account of other claims. But there is this further feature in connection with partnership law; the private assets of each partner may be called upon to meet the obligations of the firm.

8. Other Points of Law

There are certain other points about partnership law that are interesting and instructive to know, although they may have no direct bearing on keeping the books. Some of them are:

(1) That one partner may bind all the other partners by an act that could be reasonably interpreted as one ordinarily coming within the scope of the business, even though he was not authorized by his co-partners to perform that specific act. For example, one partner might incur a debt which the firm would be obliged to pay, or he might render an account or make an admission which the firm would be obliged to stand by.

(2) Unless the partnership agreement specifies the duration of the partnership, the partnership may be dissolved at will by any partner.

(3) The death or permanent insanity of any partner dissolves the partnership, as does also the bankruptcy of the firm or any member thereof. It goes almost without saying that no one should enter a partnership unless he has perfect confidence in all his co-partners, owing to the power that each partner has to act in behalf of every other partner in respect to third parties. Besides the risk thus involved, there is always the danger that the partnership may be dissolved by the death of a partner, just at the time when dissolution proceedings would be most unwelcome.

By way of contrast it may be appropriate to mention here that the corporate form of organization cannot be dissolved by the death of any of its owners, and that no owner runs a risk of losing more than his capital contribution (except in certain forms of corporations like banks, and in certain states with "double liability" laws). For these reasons, among others, the corporate form of organization

is often preferred to the partnership, although the latter enjoys a certain freedom from governmental supervision which the former does not.

9. Why Partnerships Are Formed

Two or more persons seek to form a partnership, usually because they feel that individually they cannot attain the end they desire, at least not so soon nor so easily as they can collectively. By combining, they feel more certain of attaining it. One partner may have money but no skill or expert knowledge of the business. Another may have ability as a manager, but may not have sufficient capital. A third may be a good "business getter" or salesman, but he may lack both capital and executive ability. By uniting their individual advantages or qualifications, they may believe that they will form a strong organization.

10. Drawing, Loan, Salary, and Capital Accounts

No partnership can be formed unless one of its objects is to make a profit, and in that profit the partners share in the ratio agreed upon, or equally if the ratio is not mentioned in the articles of co-partnership. Although profits for a given period cannot be accurately determined until the end of the period, it is usual for each partner to draw cash or its equivalent from the business from time to time for living expenses to apply against his share of the profits.

For that reason it is customary to open a drawing account for each partner to measure the accumulated amount of his drawings at any time during that period. The partners frequently agree among themselves as to how much cash each partner is entitled to draw within a specified length of time.

At the end of the accounting period, one of two bookkeeping procedures may be adopted; a partner's share of the profits may be credited to his drawing account, and the balance of the drawing

account closed into his capital account or the capital account may be credited directly with profits and charged with the total drawings (and losses, if any). While the first method shows clearly whether any partner drew more or less than his share of the profits, the second method, we believe, is on the whole more satisfactory because it makes the capital account alone tell the whole story of a partner's drawings for the period, his share of profits or losses, and any contributions or withdrawals of capital investment which he may have made during the period.

It has already been stated that expense accounts, earning accounts, and the profit and loss account are opened to take care of the entries representing gains and losses, for one reason, in order to save entering expenses and earnings in detail in the proprietor's capital account. The proprietor's capital account should show as far as possible, only summary figures. As a rule, contributions and withdrawals of capital are not frequent and therefore they can be credited or charged, as the case may be, directly to capital account, without being first assembled and summarized in some other account.

If a partner is allowed a salary under the terms of the agreement, it may be in lieu of a capital contribution. In other words, he invests his skill instead of money, and is allowed to accumulate a real capital account, if he so desires, by not drawing all of his salary nor all of his share of the profits. Such a partner should have a salary account and this should be credited at stated intervals, say monthly, with the amount of salary due him. This account would be in addition to any account he might have for drawings and capital. Then at the end of the accounting period, the balance of the salary account would be transferred to the credit of capital account.

The partnership may obtain loans, when needed, from individual partners acting in a private capacity, instead of from outside sources. As far as the bookkeeping is concerned, these loans should

be treated as any other liability for borrowed money, the only difference being that in case of a wind-up of the partnership, an amount loaned by an outsider would have to be paid before an amount loaned by a partner.

Thus it is possible to find on the books of a partnership, four different accounts with any one partner; a Capital account, a Drawing account; a Salary account, and a Loan account, each charged and credited as follows:

PARTNER'S CAPITAL ACCOUNT

Debited With	Credited With
(1) Withdrawals of capital, as distinguished from drawings on account of profits.	(1) Contributions of capital.
(2) Share of loss for the period.	(2) Share of profit for the period.
(3) Drawings for the period on account of profits.	(3) Salary for the period.
(4) Interest on capital deficiency, when charged.	(4) Interest on capital, when allowed.

Since items 2 and 3 for both debits and credits would be totals for the period, a mere glance at this account would be sufficient to get a clear idea of what had taken place during the accounting period, affecting the financial interest of the partner whose account was examined. A comparison of item 2 of the credits with item 3 of the debits, would tell whether or not a partner had drawn more than his share of the profit. At the same time, the capital account would show what the partner's share of the profit had been without having to refer to his drawing account, which would be necessary if profits were credited to the drawing account.

PARTNER'S DRAWING ACCOUNT

Debited With	Credited With
(1) Amounts drawn for per-	(1) Balance transferred at the

sonal use, as distinguished from deliberate reductions of capital investments, which would be charged to capital account.

end of the accounting period to the debit of capital account.

It is, of course, possible to credit this account with a partner's share of profit, and with interest on his capital investment (when allowed) and to charge it with interest on capital deficiency (when charged) as is sometimes done, but, in our opinion, the drawing account should show only the total drawings for the period. Naturally, if a partner drew more cash at any time than he needed and returned part of it, the return should be credited to Drawing account and not to Capital account.

PARTNER'S SALARY ACCOUNT

Debited With	Credited With
(1) Balance transferred at the end of the accounting period to the credit of capital account.	(1) Salary allowances periodically, usually monthly.

It would be possible to charge this account with amounts of drawings, as is sometimes done, and to transfer the net amount to capital account, but we believe this to be practically the equivalent of crediting profits less drawings to capital account, which practice we do not recommend for reasons previously stated.

PARTNER'S LOAN ACCOUNT

Debited With	Credited With
(1) Payments on account of the loan and interest, or payments in full.	(1) Amounts loaned by partner to the firm.
(2) Transfers to the credit of capital account.	(2) Interest allowed on loan.

Occasionally this account might be a loan *to* a partner instead of *by* a partner, in which case entries to the opposite of those shown above would be necessary.

11. Profit Sharing Ratio May Differ from Capital Investment Ratio

An important thing to remember in connection with partnership accounting is, that there is not necessarily any relation between the ratio in which profits and losses are shared by partners and the ratio of their capital investments. For example, one partner may have invested 90% of the capital, and yet receive only 15% of the profits, if it is so stipulated in the articles of agreement. The law, however, assumes, as has been stated before, that each partner has the same interest as any other partner in respect to both capital and profits (or losses) if the partnership agreement does not provide to the contrary.

12. Conclusion:

Thus far we have treated the subject of partnerships only in a general way, in order to give some idea of the points of law involved and the problems that arise in connection with the adjusting of accounts as between partners. In the next lessons we will illustrate more specifically, by means of a series of journal entries, the procedure peculiar to partnerships in connection with their formation, operation and dissolution under various conditions. We are not interested at this point in the operating accounts of a partnership business, but only in the transactions affecting the partners' accounts. In other words, we are not, for the moment, concerned with matters of accounting procedure common to all forms of organization, but only with such as belong peculiarly to partnerships.

QUESTIONS

Lesson 27

1. Name six essentials of a partnership.

2. In what respects, if any, does a statement of income and profit and loss of a partnership differ from a statement of income and profit and loss of a sole proprietorship, on account of the difference in forms of organization?

3. In what respects, if any, does a balance sheet of a partnership differ from a balance sheet of a sole proprietorship, on account of the difference in forms of organization?

4. Explain in what respects partnership accounting differs from the accounting for a sole proprietorship.

5. Name two conditions which would compel an equal sharing of profits and losses among partners.

6. When is a partner entitled to a salary?

7. Name at least five essential points that should be specifically covered in a partnership agreement.

8. Assuming the following trial balance, state how much cash each partner would be entitled to receive upon a wind-up of the partnership, and show how you arrived at the amounts. No mention was made in the articles of agreement as to how profits or losses should be divided.

Cash	$40,000.00	
Merchandise Creditors		$15,000.00
Bank Loan		4,000.00
A—Loan Account		1,000.00
C—Loan Account		3,000.00
A—Capital Account		2,000.00

B—Capital Account		8,000.00
C—Capital Account		5,000.00
D—Capital Account		10,000.00
Profit and Loss	8,000.00	
Total................	$48,000.00	$48,000.00

9. Name three or more accounts which a partner may have and explain the nature or the reason for each.

LESSON 28

PARTNERSHIPS
FORMATION OF PARTNERSHIP

1. Journal Entries Covering Original Formation

Inasmuch as a business receives its initial capital from contributions made by the owners, it is logical to suppose that the first journal entry in connection with the formation of a partnership should set forth clearly the amount of capital invested by each partner, with particulars as to the nature of the assets contributed. And this is true, except that there should be a few preliminary remarks in the journal, to the effect that a partnership was formed on such and such a day by certain persons, and for a certain purpose. Any other detail in respect to the articles of agreement, which it may be considered advisable to incorporate for the sake of future reference, should also be included.

Some accountants favor an opening entry charging a partner's personal account and crediting his capital account with the amount of capital which he agreed to contribute, regardless of the amount which he actually did contribute. Under such a plan, actual contributions would be credited to the partner's personal account, as made. A debit balance in the personal account would therefore measure the deficiency of the partner's capital contribution, on which interest could be charged, if so provided in the agreement.

There is some advantage in having a signal, as this account would be, to act as a constant reminder that a partner had not met his agreement in respect to capital investment, but of course this means one more kind of partners' accounts added to several others, and it would mean an account that would always have to be taken into consideration with the capital account in order to determine a partner's real capital interest in the business. We, therefore, believe that the simpler method is not to open a partner's per-

sonal account for this purpose because the object to be gained can be reached, for all practical purposes, by a memorandum at the top of the capital account stating the amount of capital which the partner agreed to contribute.

A partner may contribute services, cash, or property; if he contributes property, the property must be taken over at an agreed valuation. It is to the advantage of the partner contributing property to see that it is valued for all that it is worth, inasmuch as any profits arising from a subsequent sale thereof would be divided among all the partners in proportion to their profit-sharing ratios.

Let us assume that Adams, Brown & Chapin form a partnership on July 1, 1921, to conduct a manufacturing business, Adams agreeing to contribute $100,000, Brown $80,000, and Chapin $60,000 capital. Adams has been in business for himself as a sole proprietor in a limited way. He owns a small plant fully equipped, the net worth of which, it is agreed, is valued at $100,000. Brown and Chapin will furnish additional working capital by investing cash. The opening entries in this case might be as follows:

> "A partnership to carry on the manufacture of steel products was formed on July 1, 1921, by F. R. Adams, L. N. Brown, and P. A. Chapin, under the firm name of Adams, Brown & Chapin.
>
> "It was agreed that Mr. Adams should contribute the net assets of the manufacturing business which he had formerly been conducting in his own name, the detail of which appears below. It was further agreed that Mr. Brown should contribute $80,000, and Mr. Chapin $60,000 in cash.
>
> "Under the terms of the partnership agreement, profits and losses were to be divided as follows: Mr. Adams, 50%; Mr. Brown, 28%; and Mr. Chapin, 22%.
>
> "Partners were not to be allowed salaries nor interest

on capital contributions, but were to be charged interest at 6% per annum on deficiency of capital originally agreed upon."

Cash	$ 2,940	
Customers' Accounts	13,620	
Notes Receivable	5,210	
Raw Material	8,000	
Work in Process	12,200	
Finished Goods	15,900	
Securities Owned	3,000	
Land	15,000	
Buildings	35,000	
Machinery and Equipment	20,630	
Furniture and Fixtures	2,500	
Notes Payable		$ 6,000
Accounts Payable		18,000
Mortgage on Land and Buildings		10,000
F. R. Adams, Capital account		100,000

To credit F. R. Adams' capital account with the assets contributed by him to the firm of Adams, Brown & Chapin, less the liabilities of the old business conducted by Mr. Adams, assumed by the new firm. The valuations of assets and liabilities shown above were agreed upon by all partners (see page —— of articles of agreement), any undisclosed assets or liabilities that may come to light hereafter to be for account of Mr. Adams personally.

Cash	140,000	
L. N. Brown, Capital account		80,000
P. A. Chapin, " "		60,000

To credit the capital accounts of Mr. Brown and Mr. Chapin respectively with amounts of cash invested by them in the business.

There is nothing involved nor complicated about opening the books of a business starting under the partnership form of organization. All that is required is a plain statement of facts, with all essential details, so that they may be readily available for future reference. Each partner's capital account is credited with what he contributes to the business, just as a customer's account would be credited with a cash remittance. If a partner brings liabilities as well as assets into the business, as Mr. Adams did, the asset accounts are debited, the liability accounts are credited (all in accordance with the elementary rules of debit and credit) and the partner's capital account is credited with the excess of total assets over total liabilities, or in other words, with the net worth. This, also, is in accordance with what you have learned in connection with sole proprietorship accounting, namely, that the capital account represents or measures the net worth of the business, except that in a partnership the net worth is owned by two or more individuals, whereas in a sole proprietorship it is owned by one.

The opening journal entries for Adams, Brown & Chapin clearly indicate that the net worth of the business at the start was $240,000, owned by three partners as follows:

Adams, $100,000; Brown, $80,000; and Chapin, $60,000.

A balance sheet of the firm before any other transactions had taken place would appear as follows:

ADAMS, BROWN & CHAPIN

BALANCE SHEET, JULY 1, 1921

Assets		Liabilities	
Current Assets:		Current Liabilities:	
Cash	$142,940	Notes Payable	$ 6,000

Customers' Accounts		13,620	Accounts Payable		18,000
Notes Receivable		5,210			
Inventories:			Total Current Liabilities.....		$ 24,000
Raw Material........	$ 8,000		Mortgage on Land and Buildings..................		10,000
Work in Process..	12,200		Partners' Capital:		
Finished Goods	15,900	36,100	F. R. Adams......	$100,000	
Total Current Assets............		$197,870	L. N. Brown......	80,000	
Securities Owned.........		3,000	P. A. Chapin......	60,000	
Furniture and Fixtures....................		2,500	Total Partners' Capital		240,000
Land and Buildings..................		50,000			
Machinery and Equipment................		20,630			
Total.........		$274,000	Total........		$274,000

Referring to the method of charging partners' personal accounts with the amount of capital which they agreed to contribute, if this plan had been followed, the opening entries would have been as follows:

Adams' Personal account..............................	$100,000	
Brown's Personal account..............................	80,000	
Chapin's Personal account...........................	60,000	
Adams' Capital account...........................		$100,000
Brown's Capital account...........................		80,000
Chapin's Capital account..........................		60,000
For amounts of capital contributions agreed upon.		
Assets (in detail)...	134,000	
Liabilities (in detail)...............................		34,000
Adams' Personal account.........................		100,000
For assets and liabilities of Adams' business taken over by the firm of Adams, Brown & Chapin.		
Cash	140,000	
Brown's Personal account.......................		80,000
Chapin's Personal account.......................		60,000
For cash received from Brown and Chapin.		

In this instance the debits and credits to partners' personal accounts were the same. Therefore, these accounts were closed practically as soon as they were opened. Consequently, it seems hardly worth while to have opened them. On the other hand, if the credits for assets received were less than the debits for contributions agreed upon by any partner, the debit balance in his personal account would indicate the default. This debit balance would be ever present on a trial balance as a reminder of that deficiency until the deficiency was made up.

2. Entries When a Partner Contributes an Asset Contingent Upon Realization

It is never known, of course, whether or not all notes and accounts receivable as of a given date, will be collected in full. Experience tells us that they seldom are. Therefore, Brown and Chapin might have objected to allowing Adams to bring in his customers' accounts at the book figure of $13,620. The agreement may have been that Adams would receive credit only for amounts actually collected. However, the book value of the accounts should be shown in the ledger in order to keep proper control over them. In this case, the firm could be considered as a collection agency for Mr. Adams in respect to the balances of customers' accounts as of the date of the beginning of the partnership. Thus Mr. Adams' capital account would be credited with the net assets minus the customers' accounts, the amount of the customers' accounts being credited to a special account with Mr. Adams.

As collections were effected and credited to customers' accounts, proper records should be kept so that a journal entry could easily be made monthly (or whatever period might be decided upon), charging Mr. Adams' special account and crediting his capital account with the amount of collections.

The chances are that the new firm would continue to do

business with these same customers, and that there would ultimately be remittances that belonged partly to Mr. Adams, and partly to the new firm, so that care would have to be exercised to protect the interests of each.

3. Suggested Plan of Control when Partner's Capital Account is to be Credited Only when Collections are Made

The following simple procedure is recommended in the foregoing case, a procedure that would meet in a practical way any similar situation that might occur in any partnership, or any other form of organization.

All customers' accounts should be ruled off, and the balances as of the date of the partnership (July 1, 1921) brought down and rubber stamped as belonging to Mr. Adams. Then a list of all these balances should be made in a separate columnar record which, with subsequent entries, would appear somewhat as follows:

(1) Customer's Name	(2) Balance July 1	(3) Collected July	(4) Balance July 31	(5) Collected August	(6) Balance Aug. 31
A	$ 109	$ 57	$ 52	$ 52	
B	346	107	239	139	$ 100
C	210		210	40	170
D	430	430			
E	50		50	50	
F	60	16	44	26	18
Etc.	12,415	5,746	6,669	1,900	4,769
	$13,620	$6,356	$7,264	$2,207	$5,057

Notice that the total of column 2, $13,620, agrees with the amount of customers' accounts turned over to the business by Mr. Adams. The amounts shown in columns 3 and 5 would be obtained

by examination of the individual accounts and noting the remittances received during the months of July and August respectively. In no case should the amounts shown in columns 3 and 5 exceed the amounts in the preceding columns (2 and 4) If a remittance during the month were in excess of the amount shown as the balance at the beginning of the month, the excess would belong to the firm on account of business done subsequently to the formation of the partnership on July 1.

Collections as received should be credited to customers' accounts just as if they all belonged to the new firm, but journal entries should be made as follows:

JULY 31

F. R. Adams' Special account........................	$6,356.00	
F. R. Adams' Capital account.............		$6,356.00
For collections during July on account of customers' accounts belonging to Mr. Adams, per detail in special collection register.		

AUGUST 31

F. R. Adams' Special account........................	2,207.00	
F. R. Adams' Capital account.............		2,207.00
For collections during August on account of customers' accounts belonging to Mr. Adams, per detail in special collection register.		

Mr. Adams' special account would then show as follows:

Credit Balance July 1....................................	$13,620.00
Debit for July collections transferred to credit of capital account..............................	6,356.00
Balance July 31..	$ 7,264.00
Debit for August collections transferred to credit of capital account..............................	2,207.00

Balance August 31 .... $ 5,057.00

The detail of the balances both at July 31 and August 31 (and subsequent months) could be obtained from the collection register.

The foregoing presupposes that collections are allowed to apply toward the reduction of the oldest items first. Special remittances would require special treatment.

There should be a memorandum on each special account in the ledger, indicating why it was called special (unless for confidential reasons an explanation were inadvisable). In this instance the notation on the special account might read—"This account represents the amount included in the balances of customers' accounts which belongs to Mr. Adams personally."

4. Closing the Books of a Sole Proprietor Who Joins a Partnership

On the books of a sole proprietor who turns his business over to a partnership as his share of capital in the new enterprise, the partnership should be charged with the amount it agrees to allow the sole proprietor as his capital investment. In our example, F. R. Adams would charge Adams, Brown & Chapin $100,000 to record the sale of the business. Assuming that $100,000 was the exact amount of Adams' capital account on the books of the sole proprietorship, the closing entries might be as follows:

Adams, Brown & Chapin	$100,000	
Sundry Liabilities (in detail)	34,000	
Sundry Assets (in detail)		$134,000

To charge Adams, Brown & Chapin with the sundry assets, less liabilities, taken over by them in consideration of a capital investment in the new firm of $100,000.

F. R. Adams Capital account..........................	100,000	
Adams, Brown & Chapin........................		100,000
To credit the latter with the amount allowed by them to F. R. Adams as capital in the new firm and to close the books.		

If we assume that Mr. Adams, whose books showed his business to have a net worth of $100,000, sold it for a capital investment in the new firm amounting to $105,000, we may assume that the partnership allowed Mr. Adams $5,000 extra for an intangible asset called Good-Will, explained hereafter.

The closing entries would then be as follows:

Good-Will	$ 5,000	
F. R. Adams' Capital account................		$ 5,000
To set up the amount of good-will purchased by Adams, Brown & Chapin in taking over the assets and liabilities of the business.		
Adams, Brown & Chapin................................	105,000	
Sundry Liabilities (in detail)........................	34,000	
Sundry Assets (in detail)......................		139,000
(Explanation omitted)		
F. R. Adams' Capital account........................	105,000	
Adams, Brown & Chapin........................		105,000
(Explanation omitted)		

If, on the contrary, Mr. Adams were obliged to sell his business for less than the net worth of $100,000, shown by his books, say for $90,000, this would mean that the new firm considered one or more of the assets of the old business to be worth less than book value. Mr. Adams would then be obliged to reduce the book values accordingly by a credit to the asset accounts in question and a charge to his capital account. This would make the capital account agree with the sales price and the entries would then be as in the first case.

There is another way of closing books by first transferring the balances of all assets and liabilities to the debit and credit, respectively, of an account called "Realization and Liquidation", which we will discuss later.

5. Good-Will

As good-will is an intangible asset, something that really exists in the mind only, it may appear strange to say that it has a valuation and is sometimes bought and sold the same as an asset that can be seen and handled. Just what is good-will then? When a person is respected and liked by others, he is said to have their good-will. Good-will in business is based on practically the same principle, although the thought must be carried a little further to include the idea of a direct money return from the good-will enjoyed.

The value of good-will belonging to a business is generally measured by the exceptional profits it can show, profits in excess of a reasonable return on the capital investment plus reasonable compensation for the services of management. The purchase price of good-will, therefore, is usually the profits for a given number of years to the date of sale, minus interest on capital employed and a fair allowance for managers' salaries. The number of years taken is a matter of agreement between buyer and seller.

Good-will may be due to any one or more of the following things:

(1) Favorable location of the business, perhaps on some busy corner.
(2) Extensive advertising.
(3) The good qualities of its product.
(4) The courteous treatment of customers.
(5) The prompt settlement of claims.
(6) Reputation for the lowest prices.
(7) Other similar causes.

Good-will may, however, have a value, even though the busi-

ness does not show exceptional profits. This is when the setting is present, but advantage of its favorable position has been offset by mismanagement. A new owner, confident of his ability to supply the missing factor of efficient management, may be willing to pay for "good-will," even though a business may not have been showing an unusually good income statement.

It is not considered good accounting practice to open a good-will account on the books unless an amount is actually paid for good-will. In other words, a partnership or any other form of organization, even though it enjoyed considerable good-will, should not arbitrarily create a good-will account (with a credit to Profit and Loss account) unless the business should be sold. Then an account might be set up as a temporary account in closing the books. On the books of the purchasing company, however, it would properly appear as a fixed asset account to record the amount paid for good-will. The question of "writing off" good-will over a number of accounting periods after it has been set up, in a similar manner as deferred charges are written off, will be discussed later.

6. Journal Entries Covering the Admission of a New Partner

New partners may be admitted into the partnership, as has been stated, with the consent of all the old partners. The old partnership is immediately dissolved, however, and a new one formed, although the business may otherwise continue as if nothing had happened. It is not ordinarily necessary in such a case to go to the trouble and expense of opening entirely new books, although possibly a new journal might be advisable to set forth the detail of the new arrangement, and to act as a dividing line between the old firm and the new.

The journal entry to give effect to the admission of a new partner depends upon whether he purchased in full or in part the interest of one of the old partners, or whether he brought additional capital into the firm. If he merely bought part or all of the interest

of one of the partners, no entry is necessary on the books of the partnership, other than a journal entry charging the capital account of the partner who sold his interest, or part of it, and crediting the capital account of the new partner with the amount of the interest purchased. For example, if Y agreed to purchase from A one-half of A's interest in the firm of A, B & C, and A's interest were $100,000, the journal entry would be:

A, Capital account............................	$50,000	
Y, Capital account.........................		$50,000

In this instance, it would be no concern of the partnership how much Y paid A, for the half-interest. That would be a matter of private negotiation, just as if A were selling his house or automobile. A, however, could sell his house or automobile without the approval of his partners, whereas he could not sell his interest in the business without their consent.

But if, on the other hand, the agreement was that Y should have a one-fourth interest in the business by investing $60,000, that would be a different matter and different entries would be required.

Suppose that the interests of three partners (A, B, and C) before the admission of the fourth (Y) were each $60,000. It is plain to be seen that if the cash received from Y is entered in the cash book and credited to his capital account, no further entries would be necessary. But each partner would then have one-fourth interest in the business instead of one-third, as previously.

Take an example which is not so simple. Let us assume that the capital interests of three partners, sharing profits equally, are as follows:

A	$ 90,000
B	75,000
C	55,000
Total........	$220,000

and that they agree to sell to D a one-fourth interest in the business for $80,000. What entries should be made? If $80,000 represents a one-fourth interest in the business, the total partners' capital accounts should equal $320,000, but in this case the $80,000 cash received from D, added to the sum of the three partners' capital accounts, $220,000, would make only $300,000. What does that mean? It probably means that the three partners, in negotiating with D, set up a value of $20,000 for their Good-Will. As that Good-Will was profit to be divided equally among the three partners who sold it, the entries incident to the admission of D would be as follows:

Good-Will	$20,000.00	
A Capital account		$ 6,666.67
B " "		6,666.67
C " "		6,666.66
For value set upon the good-will of the firm in the sale of one-fourth interest in the business to D.		
Cash	80,000.00	
D Capital account		80,000.00
For cash received from D in consideration of one-fourth interest in the business.		

The balance sheet of the new firm would then appear as follows (in skeleton outline):

A, B, C, & D

BALANCE SHEET ——, 192—

Net Assets (exclusive of Good-Will)	$300,000.00	Partners' Capital Accounts:	
Good-Will	20,000.00	A	$ 96,666.67
		B	81,666.67
		C	61,666.66
		D	80,000.00
Total	$320,000.00	Total	$320,000.00

The capital ratios of the various partners, it will be noticed, changed as follows, as a result of the introduction of D into membership.

	Before	After
A	40.91%	30.21%
B	34.09%	25.52%
C	25.00%	19.27%
D		25.00%
Total........	100 %	100 %

The proportion of each of the old partners' shares in the total net asests has been reduced, but on the other hand the amount of the net assets has increased. If the agreement to share profits equally carried over into the new firm, the profit-sharing ratios would not be affected even though the capital ratios did change; it would merely mean that the profits would be divided among more partners, but if the profits increased materially as the result of bringing in the new partner, each of the three members of the former partnership might receive more profits than he had previously.

The formula to determine the good-will in cases similar to the foregoing may be briefly stated as follows:

(a) Multiply the proposed capital contribution of the new partner by the denominator of the fraction representing his interest (by 4 if his interest is to be ¼, by 5 if his interest is to be ⅕, and so on).

(b) Add the proposed capital contribution of the new partner to the amount of the net assets of the existing partnership (this, of course, is the same as the sum of the capital investments of its partners).

(c) Subtract (b) from (a) and the remainder will be the amount of good-will for the journal entry.

If a new partner were taken in on the basis of making an investment in the business to the extent of his capital contribution, without any stipulation as to what percentage of interest his contribution entitled him to receive, the only entry necessary would be a debit to cash (or property) account and a credit to the incoming partner's capital account.

Inasmuch as a new partner creates a new partnership, there should be an entirely new agreement all around as to the sharing of profits, as soon as a new partner is admitted; unless the new partner buys out the interest of one of the old partners. In that case the new partner is entitled to the same percentage of profit or must share the same percentage of loss as the partner whose interest be purchased.

The fact that a new partner is given, say a one-fourth interest, does not mean that he is, therefore, to receive one-fourth of the profits. It merely means that his capital is to be one-fourth of the total capital investment. An agreement to share profits is an entirely different matter.

QUESTIONS

Lesson 28

1. A has been the sole proprietor of a mercantile business for a number of years. He persuades B and C to invest some money and to form a partnership under the firm name of A, B, & C, to begin January 2, 1922.

In the articles of agreement, B agreed to contribute $50,000 cash and C agreed to contribute $40,000 cash and real estate adjoining A's place of business, which the partners valued at $20,000. It was also agreed to take over the assets and liabilities of A at their book figures as of December 31, 1921. It was further agreed that profits and losses should be shared in the following proportions:

A, 35%; B, 30%; C, 35%.

Each of the partners fulfilled his part of the agreement. A trial balance of A's books at December 31, 1921, was as follows:

Cash	$ 1,108.40	
Customers' Accounts	25,740.60	
Notes Receivable	1,500.00	
Merchandise Inventory	20,000.00	
Securities	2,260.00	
Accrued Interest Receivable	105.25	
Accrued Rentals	600.00	
Real Estate	17,000.00	
Delivery Equipment	2,500.00	
Unexpired Insurance	140.00	
Taxes Paid in Advance	125.00	
Notes Payable		$15,410.00
Accounts Payable		12,943.62

Accrued Taxes		1,310.63
A's Capital Account		41,415.00
Total..............	$71,079.25	$71,079.25

Show the opening entries for the partnership in two different ways.

2. Define Good-Will. State seven ways by which it may be built up over a period of time, one way by which it may be acquired quickly, and one way by which its money value may be determined.

3. Given the following trial balance of the partnership of A & B, prepare the journal entry or entries to give effect to the admission of C, who invests $15,000 cash in the business, profits and losses to be shared equally. For the sake of simplicity, make cash book entry in journal entry form:

A & B

TRIAL BALANCE JULY 31, 1922

Cash	$ 1,000.00	
Customers' Accounts	58,000.00	
Merchandise	53,000.00	
Stocks and Bonds	18,000.00	
Manufacturing Plant	40,000.00	
Notes Payable		$ 15,000.00
Accounts Payable		20,000.00
Reserve for Depreciation........		8,000.00
Reserve for Uncollectible Accounts		2,500.00
A—Capital Account		61,000.00
B—Capital Account		63,500.00
Total................	$170,000.00	$170,000.00

4. Assume that immediately after C is admitted into the

partnership as mentioned in Question 3, A, B, and C agree to take in D and to sell him twenty per cent interest in the business for $36,000.00 cash. D accepts the offer and pays in the required amount.

Submit a balance sheet of the firm of A, B, C & D immediately after D is admitted and state the capital ratios of each of the four partners, assuming that profits and losses are to be shared equally.

5. X, Y and Z form a partnership on July 1 to continue the business formerly conducted by X as a sole proprietor. As Y and Z have no way of appraising the value of the customers' accounts carried on the books of X, an agreement is reached whereby X's capital account is to be credited at the end of each month with amounts of customers' accounts actually collected during the month. It is agreed, however, that the accounts shall be carried at face value on the books of the partnership.

For the sake of simplicity assume that there were only eight customers, and that a trial balance of their accounts at June 30 was as follows:

A	$ 4,522.60
B	3,210.09
C	502.43
D	809.16
E	10,650.90
F	144.06
G	10.93
H	4.30
Total	$19,854.47

Assuming the following collections during July, August and September, prepare the necessary journal entries to give effect to the agreement, and show how you arrived at the figures for each journal entry:

July—A, $440.50; H, $104.30; B, $3,000.00; D, $300.00
C, $502.43.

Aug.—C, $107.10; A, $82.10; F, $43.06; D, $200.00
E, $5,600.00; H, $40.90; B, $40.00.

Sept.—D, $309.16; G, $10.93.

6. From the following before-closing trial balance as at July 31, 1922, of John Smith, sole proprietor, prepare the journal entries closing his books, Smith having sold his net assets (exclusive of cash) to Thomas Wilson for $85,000.00 cash and a mortgage on the plant property for $25,000.00:

Cash ....$	5,000.00	
Materials and Supplies............	16,000.00	
Notes Receivable	5,600.00	
Customers' Accounts	45,000.00	
Coal	560.00	
Cash Discounts	40.10	
Legal Expense	140.60	
Salaries	5,210.00	
Wages	10,960.00	
Plant Property	70,000.00	
Unexpired Insurance	400.00	
Prepaid Taxes	156.40	
Cost of Goods Sold..................	80,000.00	
Accounts Payable		$ 10,000.00
Notes Payable		15,000.00
Sales		110,000.00
Accrued Wages		369.10
Accrued Interest		200.00
Provision for Uncollectible Accounts		900.00
John Smith, Capital Account..		94,598.00
Provision for Depreciation......		8,000.00
Total................$	$239,067.10	$239,067.10

LESSON 29

PARTNERSHIPS
ACCOUNTING PROCEDURE DURING PARTNERSHIP

1. Introductory

Having discussed the opening entries incident to the original formation of a partnership and the entries incident to the admission of a new partner, we will next consider the partnership after it has been in operation for the length of an accounting period, and take up the problems in connection with the distribution of profits and losses, and other adjustments of capital accounts at the end of the period.

Down to the point of determining the final profit for the year, partnership accounting differs in no way from sole proprietorship accounting or the accounting for a corporation. Therefore, it is not necessary to go back over any of the ground already covered in connection with the theory of accounts or with the make up of balance sheets and statements of income and profit and loss. It is only necessary to explain the preparation of the closing entries affecting partners' accounts. But as these closing entries depend largely upon the terms of the partnership agreement, the subject will have to be treated in a more or less disconnected way, by taking up one problem at a time covering the various conditions that might be found.

2. Different Methods of Dividing Profits and Losses

While partners may agree to divide the profits and losses in any way they see fit, one of the following methods is usually adopted:

(1) Equally.

(2) According to fixed ratios.

(3) According to proportion of capital invested at the beginning of the accounting period.

(4) According to capital invested at the end of the accounting period, but before the capital account is credited with profits for the period.

(5) According to average capital investment maintained during the accounting period.

3. Illustrating the Distribution of the Final Profit Brought Down

If profits are to be divided equally, the solution of the problem is self-evident. Assuming a final profit of $4,000 to be divided among four partners, the journal entry to record the distribution would be somewhat as follows:

Profit and Loss..............................	$4,000.00	
A, Capital account................		$1,000.00
B, " "		1,000.00
C, " "		1,000.00
D, " "		1,000.00
For distribution of the profits for the year, as per partnership agreement (or according to law in the absence of a partnership agreement).		

Following is an illustration of an assumed profit and loss account as it would appear in the ledger after the posting of the foregoing journal entry:

PROFIT AND LOSS

Returns and Allowances		$ 1,500	Gross Sales	$125,000
Cost of Goods Sold:			Discounts Earned	250
Inventory, Jan. 1, 1921	$ 23,000		Interest Earned	400
Purchases	100,000			
	$123,000			
Inventory, Dec. 31, 1921	25,000			
		98,000		
Advertising		900		
Salesmen's Salaries and Expenses		5,935		
Commissions		3,700		
Office Salaries		9,000		
Rent		2,000		
Stationery		100		
Interest Expense........		40		
Uncollectible Accts.....		300		
Discounts Allowed		175		
Balance Down, Final Profit		4,000		
		$125,650		$125,650
A, Capital account..		$ 1,000	Final Profit Brought Down........	$ 4,000
B, " " ..		1,000		
C, " " ..		1,000		
D, " " ..		1,000		
		$ 4,000		$ 4,000

The foregoing Profit and Loss account was included at this point to illustrate the method of carrying the final profit down into a separate section to show how the final profit was distributed.

If there had been a loss of $4,000, instead of a profit, the $4,000 would have been brought down as a debit, and the final section would have been cleared by a transfer of the balance to the debit of the capital accounts of A, B, C, and D, instead of to their credit.

One of the things to remember in connection with partnership accounting, therefore, is that the final profit for an accounting

period is determined in the usual way, and either brought down into a separate section of the Profit and Loss account itself or transferred to another account possibly called Profit Distribution account, although such an account would appear to be superfluous. The next step is to find out how that final profit or loss should be distributed. When this has been done, the journal entry transferring the balance to the partners' capital accounts (or drawing accounts, whichever plan is adopted) is easy. The only possible difficulty in the matter is to determine the amount of profit or loss to be credited or charged to each partner's account when the agreement is that profits or losses shall be divided according to the average capital investment. But this is a problem that belongs to arithmetic rather than to accounting.

Let us illustrate the methods of distributing profits or losses in the order in which they were listed, assuming in each case the same $4,000 final profit and the same four partners, A, B, C, D.

4. Illustrating Profits and Losses Shared Equally

This method has already been shown under Section 3 and needs no further illustration.

5. Illustrating Profits and Losses Shared According to Fixed Ratios

In this case one must know the ratios. They can be any ratios at all, as long as they were mutually agreed upon, even though one or more of the partners invested neither cash nor property, but merely his skill and services. Let us assume ratios agreed upon as follows:

A	60%
B	30%
C	5%
D	5%
Total	100%

The profit of $4,000, in such a case, would naturally be divided as follows:

A	60% of $4,000	$2,400
B	30% of 4,000	1,200
C	5% of 4,000	200
D	5% of 4,000	200
	Total	$4,000

and the journal entry would be prepared accordingly as follows:

Profit and Loss	$4,000.00	
A, Capital account		$2,400.00
B, " "		1,200.00
C, " "		200.00
D, " "		200.00

6. Illustrating Profits and Losses Shared According to the Proportion of Capital Invested at the Beginning of the Period

In this case one must know, of course, what the capital investment of each partner was at the beginning of the period, which should be obtained easily by reference to the partners' capital accounts.

Let us assume capital investments at Jan. 1, 1921, as follows:

	Amount	Proportion of Total
A	$ 25,000	25%
B	30,000	30%
C	10,000	10%
D	35,000	35%
Total	$100,000	100%

Then the profit of $4,000 would naturally be divided as follows:

A	25% of	$4,000.00	$1,000.00
B	30% of	4,000.00	1,200.00
C	10% of	4,000.00	400.00
D	35% of	4,000.00	1,400.00
	Total		$4,000.00

and the journal entry would be prepared accordingly as follows:

Profit and Loss	$4,000.00	
A, Capital account		$1,000.00
B, " "		1,200.00
C, " "		400.00
D, " "		1,400.00

7. Illustrating Profits and Losses Shared According to the Proportion of Capital Invested at the End of the Period.

This method is the same as the preceding method, except that the balances of partners' capital accounts at the end of the period (before distributing profits or losses) would be taken instead of their balances at the beginning of the period.

8. Illustrating Profits and Losses Shared According to Average Capital Investments—Averaging an Account

In this case one must refer to all the entries in the capital account for the period and "average" them. Averaging an account is usually done in one or the other of two ways as illustrated below. For this purpose, let us assume that the capital accounts of the four partners for the year 1921, appeared as follows:

A

1921			1921		
Apr. 9	Cash withdrawn..	$ 5,000.00	Jan. 1	Balance	$25,000.00
Sept. 16	" " ..	1,000.00	Aug. 9	Cash contributed..	40,000.00
Dec. 5	" " ..	30,000.00	Oct. 20	" " ..	16,000.00
Dec. 31	Balance down......	45,000.00			
		$81,000.00			$81,000.00
			Dec. 31	Balance down......	$45,000.00

B

Dec. 31	Balance down......	$59,000.00	Jan. 1	Balance	$30,000.00
			Feb. 6	Cash contributed ..	8,000.00
			Feb. 28	" " ..	9,000.00
			Dec. 6	" " ..	12,000.00
		$59,000.00			$59,000.00
			Dec. 31	Balance down	$59,000.00

C

Sept. 3	Cash withdrawn..	$ 4,000.00	Jan. 1	Balance	$10,000.00
Dec. 31	Balance down......	6,000.00			
		$10,000.00			$10,000.00
			Dec. 31	Balance down........	$ 6,000.00

D

Apr. 1	Cash withdrawn..	$ 1,000.00	Jan. 1	Balance	$35,000.00
Sept. 1	" " ..	2,000.00	July 1	Cash contributed..	15,000.00
Dec. 31	Balance down......	59,000.00	Aug. 1	" " ..	12,000.00
		$62,000.00			$62,000.00
			Dec. 31	Balance down	$59,000.00

An account is averaged by first reducing all entries to a common basis of "principal per day" or per month or per any other given unit of time. The interest on one dollar invested for three hundred and sixty-five days would be the equivalent of the interest on three hundred and sixty-five dollars invested for one day at the same rate. That is to say, if a person invested $1 for one year at 6%, or $365 for one day at 6%, he would receive the same amount of interest.

Furthermore, an investment for one day of................	$365
And an investment for one day of............................	400
Would be the equivalent of an investment for one day of	$765

If all the entries in a partner's capital account during a given period of time are reduced to the one-day basis, as shown above, and the same thing is done with every other partner's account, a comparison of partners' capital investments can easily be made. To illustrate with the accounts of A, B, C, D.

A

From	To	Number of Days	Amount Invested	Principal Per Day
Contributions:				
Jan. 1	Dec. 31	365	$25,000.00	$ 9,125,000.00
Aug. 9	"	144	40,000.00	5,760,000.00
Oct. 20	"	72	16,000.00	1,152,000.00
		Total..........	$81,000.00	$16,037,000.00
Withdrawals:				
Apr. 9	Dec. 31	266	$ 5,000.00	$ 1,330,000.00
Sept. 16	"	106	1,000.00	106,000.00
Dec. 5	"	26	30,000.00	780,000.00
		Total..........	$36,000.00	$ 2,216,000.00
	Balance December 31..........		$45,000.00	$13,821,000.00

B

Contributions:				
Jan. 1	Dec. 31	365	$30,000.00	$10,950,000.00
Feb. 6	"	328	8,000.00	2,624,000.00
Feb. 28	"	306	9,000.00	2,754,000.00
Dec. 6	"	25	12,000.00	300,000.00
	Balance December 31		$59,000.00	$16,628,000.00

C

Contributions:				
Jan. 1	Dec. 31	365	$10,000.00	$ 3,650,000.00
Withdrawals:				
Sept. 3	"	119	$ 4,000,00	$ 476,000.00
	Balance December 31		$ 6,000.00	$ 3,174,000.00

D

Contributions:				
Jan. 1	Dec. 31	365	$35,000.00	$12,775,000.00
July 1	"	183	15,000.00	2,745,000.00
Aug. 1	"	152	12,000.00	1,824,000.00
		Total	$62,000.00	$17,344,000.00
Withdrawals:				
Apr. 1	Dec. 31	274	$ 1,000.00	$ 274,000.00
Sept. 1	"	121	2,000.00	242,000.00
		Total	$ 3,000.00	$ 516,000.00
	Balance December 31		$59,000.00	$16,828,000.00

Partner	Investment equal to		Per Cent of total
A	$13,821,000.00	for one day	27.39%
B	16,628,000.00	" " "	32.96%
C	3,174,000.00	" " "	6.29%
D	16,828,000.00	" " "	33.36%
Total	$50,451,000.00	" " "	100 %

From the foregoing it can be seen that the profit of $4,000 for the year should be divided among the partners as follows:

A	27.39%	$1,095.60
B	32.96%	1,318.40
C	6.29%	251.60
D	33.36%	1,334.40
Total	100 %	$4,000.00

To illustrate the other method of averaging an account, we will use only the account of A, as the same procedure would hold good for the accounts of B, C, and D.

It will be noticed that A's balance ($25,000) did not change between January 1 and April 9. On April 9 it changed to $20,000 and on August 9 it changed again to $60,000. This second way of averaging an account takes each balance separately and determines how long it was employed in the business, then adds the results as follows:

A

From	To	Number of Days	Balance	Principal Per Day
Jan. 1	Apr. 9	99	$25,000.00	$ 2,475,000.00
Apr. 9	Aug. 9	122	20,000.00	2,440,000.00
Aug. 9	Sept. 16	38	60,000.00	2,280,000.00
Sept. 16	Oct. 20	34	59,000.00	2,006,000.00
Oct. 20	Dec. 5	46	75,000.00	3,450,000.00

Dec. 5	Dec. 31	26	45,000.00	1,170,000.00
	Total	365		$13,821,000.00

The final result is the same as before, but by this method the calculation of the number of days used may be easily checked in that the total of the "number of days" column must equal the number of days from the first entry to the last (both inclusive). In our illustration we began with January 1 and ended with December 31. Therefore the total number of days was 365. It will be noticed that this figure checks.

It will also be noticed that the final balance ($45,000) agrees with the balance of A's account at December 31, which is fairly conclusive evidence that right amounts were shown in the "balance" column, although this is not necessarily so, because there might have been offsetting errors. While the work of putting down the right dollar amounts, when the first method is used, may be as easily checked as when the second method is used, an error in calculating the number of days would go undetected, unless it were caught by re-checking the work. Therefore, the second method would appear to be preferable to the first.

In computing the number of days, the beginning day and the ending day are not *both* included, but only one of these days, except as noted hereafter. The reason for this will perhaps be more apparent if you will refer to the table illustrating the second method. In computing the days from April 9th to August 9th, the total would be 123 days (instead of 122 days as shown in the table) if both days were included. Similarly the next period would be 39 days instead of 38 days and so on. This procedure would result in a total of 370 days for the year, which would be manifestly incorrect. On the other hand, in computing the days in the first period, both beginning and ending days must be included, otherwise, the number of days for this period would be 98 in the table, and the total for the year would be only 364. It is evident, of course, that the balance of a partner's account at the beginning of the year

must be considered as employed in the business a full 365 days, if the account is averaged for a year; and this result is attained by always including both beginning and ending dates in arriving at the number of days in the first period.

9. Partners' Overdrafts

In actual practice you will probably not find as many contributions and withdrawals of capital during the year in partners' accounts, as we have used to illustrate the averaging of investments.

Amounts withdrawn by partners during an accounting period are usually against anticipated profits and are charged as such to their drawing accounts, although by special arrangement cash can be taken by a partner as a withdrawal of capital, in which case the amount withdrawn would be charged to his capital account. Drawings may be limited by agreement, but in spite of the agreement one or more partners may exceed the limit. If he does, it should not be without the knowledge of the other partners, all of whom have free access to the books. Partners may have in the agreement some means of penalizing any partner for drawing in excess of his periodical allowance, either by charging him interest on the excess, or by adopting some other measure. If a partner will not live up to his agreements there is always, of course, the possibility that the other partners will dissolve the partnership.

The situation may arise where even the authorized drawings of a certain partner may exceed the final profit to which he is entitled at the end of the accounting period. In that case the excess might be considered a withdrawal of capital as at the end of the period or as an amount due the firm from the partner whose account shows such overdraft. Almost every partnership problem has to be solved by an individual analysis of circumstances and conditions.

10. Interest on Partners' Capital

The ideal way, of course, to insure equal treatment for all

partners, would be to have each partner contribute the same amount of capital, devote the same amount of time and skill to the management of the business, and share equally in the profits and losses. But for obvious reasons this could seldom be arranged. Therefore other means are sometimes adopted in order to try to secure more or less equal treatment for all partners. For example, there may be two partners contributing equal skill but unequal capital. They may arrange to share equally in the profits but to allow interest on partner's capital investment, with the idea of giving the partner contributing the larger share of capital the larger amount of interest. This should not be considered as an allowance for interest in the ordinary sense of the word, but rather as an amendment to the agreement to share profits equally. This fact is more apparent if one thinks of the final profit as divisible into two parts, and assumes that first a certain amount is taken away from the total profit to be given to the partners in unequal proportions in accordance with a certain percentage of their capital investment, and that then the balance is divided equally. To illustrate, A contributes $20,000 and B, $15,000 capital. They agree to share profits equally, after allowing interest on capital accounts at 6% per annum. A final profit of $7,000 is made. In this case the $7,000 would be divided between the two partners as follows:

Portion divisible unequally (based on "interest" on capital):		
A ....6% of $20,000.00........	$1,200.00	
B ....6% of 15,000.00........	900.00	
		$2,100.00
Portion divisible equally:		
A	$2,450.00	
B	2,450.00	
		4,900.00
Total		$7,000.00

Thus the two partners would receive amounts as follows:

	As "Interest"	As Share of Balance	Total
A	$1,200.00	$2,450.00	$3,650.00
B	900.00	2,450.00	3,350.00
	Total		$7,000.00

The Profit and Loss account, after the journal entry distributing the final profit had been posted, would appear (in skeleton form) as follows:

PROFIT AND LOSS

Sundry Expenses	$15,000.00	Sundry Earnings	$22,000.00
Balance, Final Profit down	7,000.00		
	$22,000.00		$22,000.00
A, Interest on Capital	$ 1,200.00	Final Profit brought down	$ 7,000.00
B, Interest on Capital	900.00		
A, Share of Profit	2,450.00		
B, Share of Profit	2,450.00		
	$ 7,000.00		$ 7,000.00

Notice that although the amounts of $1,200.00 and $900.00 are shown as "interest on capital", they appear in the Profit and Loss account *after* the final profit of $7,000 has been brought down and not before. The reason for this is that they are not considered as interest expense of the business, but as a distribution of profits agreed upon in order to try to equalize matters as between A and B, A having contributed the larger share of capital.

If the "interest on partners' capital" had been considered as interest expense of the business, and included in the item of sundry expenses in the first section, that figure would have become $17,100 and the "final profit" would have been shown as $4,900 instead of

$7,000. As far as the amounts credited to A and B are concerned, the results would be the same whether the bookkeeping entries were made the one way or the other. A would still be credited with $1,200 as "interest" and $2,450 as "profit", even if interest on partners' capital were included among the expenses; and likewise B would be credited with $900 as "interest" and $2,450 as "profit". The only difference would be that the amount of $4,900 shown as final profit would not be correctly stated as such, because it would represent final profit *after a certain portion of it had been distributed to partners' accounts.* This would be misleading to anyone referring to the Profit and Loss account.

The foregoing remarks apply only when interest is allowed on *all* partners' capital accounts.

It is interesting to bear in mind that even though a partner may be allowed interest on his capital investment, he never in reality receives the full amount of that interest, because when his account is credited, Profit and Loss account must be charged (either above or below the final profit line), which reduces to that extent the amount of profits to be distributed according to the profit-sharing ratios. In other words, the partner receives interest on his capital, *less* his profit-sharing proportion of that amount. If there were five partners sharing profits and losses equally, and one of them was allowed $100 as interest on his capital account, he would actually receive only $80 because his account must in effect be charged with one-fifth of the $100 allowed him, or $20. We say "in effect" charged to his account, because the amount allowed as "interest" reduces the portion of the final profit which he receives as "profit," and a reduction of a credit is "in effect" a debit.

Allowing interest on capital accounts may in some cases work out in a strange fashion. Under certain circumstances the credit to a given partner's account on account of interest on capital may be less than the debit resulting therefrom, even though his capital may be larger than that of any other partner. This may be brought

about through the inequality of the profit and loss sharing ratios, and the fact that each partner must stand his share, not only of the amount credited to his own account as interest, but of the amounts credited to the other partners as well. The point may be illustrated by the following table:

	Capital	Per cent of total capital	Credit for interest on capital at 6%	Profit & loss sharing ratios	Debit for proportion of total interest allowed all partners	Excess of debit over credit	Excess of credit over debit
A	$10,000.00	27.9%	$ 600.00	40%	$ 864.00	$ 264.00	
B	8,000.00	22.2%	480.00	30%	648.00	168.00	
D	6,000.00	16.7%	360.00	3%	64.80		295.20
C	6,000.00	16.6%	360.00	5%	108.00		$ 252.00
E	4,000.00	11.1%	240.00	15%	324.00	84.00	
F	2,000.00	5.5%	120.00	7%	151.20	31.20	
Total..........	$36,000.00	100 %	$2,160.00	100%	$2,160.00	$ 547.20	$ 547.20

Inasmuch as the profit and loss sharing ratios may be arbitrarily fixed by the partners, regardless of the proportion of capital invested by each, an indefinite number of tables like the foregoing could be prepared. The point of this whole matter is that when the subject of allowing interest on capital accounts is being discussed, the proportion in which profits and losses are shared should not be overlooked. The partner contributing the largest capital might think he would benefit the most by an agreement to allow interest on capital, whereas he might fare the worst, depending upon the profit and loss sharing ratios.

Where the profit and loss sharing ratios and the capital ratios are the same, there is no need of an agreement to allow interest on capital accounts, because the amount charged to each partner's account would be the same as the amount credited.

This may be illustrated by the following table:

	Capital	Credit for interest on capital at 6%	Profit and Loss sharing ratios	Debit for proportion of total interest allowed all partners
A	$10,000.00	$ 600.00	16⅔%	$ 600.00
B	10,000.00	600.00	16⅔%	600.00
C	15,000.00	900.00	25 %	900.00
D	25,000.00	1,500.00	41⅔%	1,500.00
Total..............	$60,000.00	$3,600.00	100 %	$3,600.00

If the capital ratios are the same, and the profit and loss sharing ratios are unequal, the partner with the smallest profit and loss sharing ratio will benefit by an agreement to allow interest on capital accounts.

If the profit and loss sharing ratios are the same and the capital ratios are unequal, the partner contributing the most capital will benefit by an agreement to allow interest on capital accounts.

11. Partners' Salaries

There are two ways of treating salaries paid to partners, depending upon the purpose of the salaries.

(1) Salaries may be allowed to partners on the same principle and for a similar reason as interest on their capital investments is credited to their accounts, namely to try to equalize matters by allowing one partner more salary than another.

(2) On the other hand, a salary may be allowed to a certain partner solely as compensation for management. Such a partner may agree to allow his salary to accumulate and be credited to his capital account in lieu of a cash contribution of capital, his drawings to apply against

his share of profits as a partner, rather than against his salary.

If salaries are paid in accordance with the purpose mentioned under (1), the so-called salaries are in reality divisions of profits. They are no more salary expense than interest on capital accounts is interest expense under certain circumstances, as has already been explained. Therefore the entries for salaries in this case should be debited to Profit and Loss account, after the final profit has been brought down and not before.

In case (2) the partner may be thought of as a paid employee. The amount he receives as salary should be charged to salary expense account (which will therefore be charged to Profit and Loss account before the final profit, or loss, has been determined).

12. Difference Between Expenses and Distribution of Profits

The distinction between an expense of the business and a distribution of the profits must be kept clearly in mind. By way of summarizing what has already been said, let us repeat that a partner may receive credit for an item that is an expense to the business, or for one that represents a distribution of profits. Interest allowed to a partner on account of any loan he may have made to the firm is an expense of the business just as much as interest paid on any other borrowed money. On the other hand, if interest is allowed on all partners' capital accounts in order to effect an adjustment of the distribution of profits, it is not considered as an expense of the business, but rather as a distribution of profits. Likewise salary paid to a partner as compensation for management is considered an expense of the business, but salaries paid to partners in order to effect an adjustment of the distribution of the profits are not so considered. Such salaries are considered as distributions of profits.

If salaries or interest are expenses of the business, they should

be charged to Profit and Loss account at the end of the accounting period, *before* the final profit is brought down. If they are distributions of the final profit, they should be charged to Profit and Loss account *after* the final profit has been brought down. This procedure should be followed in order that the figure shown as final profit in the Profit and Loss account may be correctly stated as such.

QUESTIONS

LESSON 29

1. A partnership agreement between A and B merely provides that A shall contribute $70,000 and B $15,000, and that profits and losses shall be shared as follows: A, 3/8; and B 5/8. What rate of interest would you, as an accountant, recommend in order to reconcile, as far as possible, the larger capital contribution of A with his smaller proportion of profits?

2. If you were given a problem to work in an examination involving the debiting of some accounts and the crediting of others, and your time was limited, what method would you adopt so that you would not get confused by the various entries and would keep control over your work? A simple problem of the kind is found in Question 8, Lesson 27. Use the figures mentioned in that problem to illustrate your method. Do not use the method shown in the model answer to Question 8 of Lesson 27.

3. State three principal ways in which profits and losses may be shared by partners.

4. In partnership accounting, is Profit and Loss account ever charged with items other than balances of expense accounts closed out or credited with items other than balances of earning accounts closed out? If so, explain how and when.

5. Assuming the following capital account of A, compute the rate of interest per year, which has been allowed A on his average capital investment for the six months ended August 31, 1922. Show two different methods of arriving at the answer, computing interest on the 365 day basis.

A CAPITAL ACCOUNT

1922			1922		
Jan. 5	Withdrew	$ 2,000.00	Jan. 1	Balance	$15,000.00
Feb. 9	"	510.00	Feb. 28	Cash contributed	4,000.00
June 11	"	840.00	Mar. 16	" "	8,000.00
July 5	"	900.00	May 5	" "	1,000.00
Aug. 30	"	5,000.00	July 26	" "	500.00
Aug. 31	Balance	19,580.74	Aug. 31	Interest	330.74
		$28,830.74			$28,830.74
			Sept. 1	Balance down	$19,580.74

6. Three partners, A, B, and C, share profits and losses as follows: A, 33⅓%; B, 60%; and C, 6⅔%. At the end of the accounting period the earnings show $50,000 and the expenses $60,000. Prepare the journal entry distributing the loss and show the Profit and Loss account (in skeleton form) after the books have been closed.

7. Three partners, A, B, and C, agreed to share profits and losses according to their capital investments in the business at the beginning of an accounting period, and to close their books every six months.

A before-closing trial balance at December 31 showed the following partners' accounts:

A—Loan account	(credit)	$ 6,000.00
A—Drawing account	(debit)	10,000.00
B— " "	(debit)	5,000.00
C— " "	(debit)	150.00
A—Capital account	(credit)	3,200.00
B— " "	(credit)	1,100.00
C— " "	(debit)	800.00

Contributions and withdrawals of capital had been made by A, B, and C during the year as follows:

	Contributions			Withdrawals		
	A	B	C	A	B	C
Jan. 5	$ 2,000					
Feb. 6	8,000					
Apr. 10					$ 4,000	
July 15						$9,000
Nov. 1		$6,000				
Nov. 26					8,000	
Dec. 4			$3,000			
Total..........	$10,000	$6,000	$3,000		$12,000	$9,000

The firm made a profit for the six months ended December 31 of $11,222.16. What was the share of each partner? Show how you arrived at your answer.

8. Under what circumstances is interest allowed to a partner considered as expense of the business? When is it considered a distribution of profit?

LESSON 30

PARTNERSHIPS
DISSOLUTION OF PARTNERSHIPS

1. Introductory

In the two previous lessons, we have discussed the subject of accounting in respect to the formation of partnerships and in respect to the handling of partners' accounts in a going concern. This lesson will treat of the steps to be taken in connection with the dissolution of a partnership. A partnership may be dissolved and a new one formed to continue the work of the old, as when a new partner is admitted, but as this matter has already been covered, we will consider, for our present purpose, that dissolution means winding up the affairs of the partnership and going out of business.

2. Reasons for Dissolution

Following are some of the principal reasons why partnerships may be dissolved:

(1) Inability to continue in business.

(2) Bankruptcy of the firm.

(3) Bankruptcy of a partner.

(4) Permanent insanity of a partner.

(5) Death of a partner.

(6) Expiration of the time set for the partnership, as stipulated in the partnership agreement.

(7) By the fulfillment of the purpose for which the partnership was formed.

(8) By unanimous vote of the partners, notwithstanding the original articles of agreement.

(9) At the will of any partner; but if the partnership agreement specified a fixed time or purpose, and the time has not expired nor the purpose been fulfilled, such a partner may, however, be held liable for damages for dissolving the partnership under such circumstances.

If the partnership is dissolved on account of bankruptcy, a temporary receiver may be appointed by the court until a trustee can be elected by the creditors to take charge of liquidating the business, and the partners have nothing further to do, outside of perhaps giving necessary information to the receiver or trustee. If a partner dies, a surviving partner (or partners) winds up the partnership affairs.

3. Meaning of Realization and Liquidation

Whatever may be the reason for winding up the affairs of a partnership, the person in charge of the work usually proceeds at once to dispose of the assets for cash and to apply the cash in the way the law demands, namely:

(1) To pay off creditors.
(2) To repay partners' loans.
(3) To return partners' capital, plus profits or minus losses on realization.

The word "realization" is used to mean the reduction of assets (other than cash) to cash and the word "liquidation" to mean the paying off of liabilities. Payments to creditors and partners are especially used in connection with partial and intermittent payments of debts. For example, a creditor of a bankrupt concern may receive as an initial payment a "liquidating dividend" of 25%, one-quarter of his claim. Three or four months later, he may receive another "dividend". This time it may be 10%. If the assets of the bankrupt did not warrant any further payments, the second amount would be the "final dividend", in which case the creditor would receive altogether only 35% of the amount due

him from the bankrupt. "Liquidating dividends" must not be confused with dividends paid on the shares of capital stock of a corporation, which are distributions of profits and not payments on account of the corporation's debts.

All of the assets of a partnership do not necessarily have to be converted into cash upon dissolution. Some of the partners may accept non-cash assets at agreed valuations to apply toward a return of their capital investments.

4. Books Should First be Closed

The first step in liquidating a partnership is to close the books. This would usually involve the taking of an inventory, and the determination of profits and losses from the end of the last accounting period to the date of dissolution. If the result were a profit, the profit should, of course, be transferred to the credit of partners' capital accounts; if a loss, to their debit, in accordance with the profit and loss sharing ratios. All other partners' accounts, except loan accounts, should also be closed into their capital accounts. After all of these things have been done, a trial balance of the ledger would show only the following:

Debits	Credits
Cash	Due to Outside Creditors
Non-cash assets	Partners' Loan accounts
	Partners' Capital accounts

One or more of the partners' capital accounts might show a debit balance. Such debit balances would, of course, appear on the debit side of the trial balance, but for the time being we will not consider this situation.

5. Divisions of Losses or Gains from Realization and Liquidation

The operations of the business, as such, would cease as soon as the dissolution was decided upon. Therefore there would be

no further profits nor losses from ordinary sources, but there would be expenses incident to winding up affairs, and there might be gains or losses from the realization of the non-cash assets. Certain items such as interest and taxes, which could not be controlled and shut off at the date of dissolution (as could merchandising activities, for example), would be considered as part of the expenses of liquidation.

It is important to bear in mind that profits and losses subsequent to the date of dissolution should be shared by the partners in the profit and loss sharing ratios, the same as profits and losses prior thereto. The reason for this is that, although operations cease as soon as dissolution is decided upon, the partnership does not end until the business is entirely wound up.

If the profit and loss sharing ratios differed from the capital ratios, the partners could not properly say to one another at the date of dissolution, "Whatever is left over from the assets now on hand, after paying the expenses of liquidation, creditors, and partners' loans (if any), shall be divided among us in proportion to our capital ratios".

At first thought it might seem that, inasmuch as the sum of the partners' capital accounts represented the net worth of the business at the date of dissolution, the net assets should be divided among them according to their capital ratios. And so they should be divided, *if* the net assets were represented entirely by cash. But since that rarely happens to be the case, and since there is usually a loss in realizing assets (although there is sometimes a profit), partners who decide to share the net proceeds resulting from liquidation in proportion to their capital ratios at the date of dissolution, would share the profits or losses due to realization and liquidation in the proportion of their capital ratios and not of their profit and loss sharing ratios.

The point may be illustrated by considering the following trial balances before and after the liquidation of a business:

DEBITS	Before	After
Cash	$ 5,000	$17,000
Non-Cash Assets	20,000	
Loss on Sale of Assets		2,000
Expenses Paid		1,000
	$25.000	$20,000

CREDITS	Before	After
Accounts Payable	$ 2,000	
Partners' Loans	3,000	
Partners' Capital:		
A, $10,000		
B, 5,000		
C, 5,000		
	20,000	$20,000
	$25,000	$20,000

The partners' capital ratios, as shown above, are A, 50%; B, 25%; and C, 25%. Let us assume that their profit and loss sharing ratios had been: A, 60%; B, 18%; and C, 22%. The $17,000.00 net proceeds from liquidation was arrived at as follows:

Cash Before Liquidation	$ 5,000.00	
Sale of Non-Cash Assets	18,000.00	
		$23,000.00
Less Payments:		
Expenses	$1,000.00	
Creditors	2,000.00	
Partners' Loans	3,000.00	
		6,000.00
		$17,000.00

The books show that the partners at the date of dissolution had an aggregate investment in the business of $20,000, although when it came time to return their investments there was only $17,000 in cash left. Therefore they were obliged to suffer a loss of $3,000.

If the division of the $17,000 were made in the proportion of capital investments, A would receive $8,500, B $4,250, and C

$4,250. If the division were made in the proportion of capital investments ***after the loss of $3,000 had been charged to the partners' capital accounts according to the profit and loss sharing ratios,*** A would receive $8,200 instead of $8,500; B $4,460, instead of $4,250; and C, $4,340, instead of $4,250, as shown by the following table:

	Capital Before Charging Loss	SHARE OF LOSS Percentage	Amount	Capital After Charging Loss
A	$10,000.00	60%	$1,800.00	$ 8,200.00
B	5,000.00	18%	540.00	4,460.00
C	5,000.00	22%	660.00	4,340.00
Total....	$20,000.00	100%	$3,000.00	$17,000.00

Examiners frequently test the student's knowledge of the point which is brought out in the foregoing, namely, that profits and losses from realization and liquidation, as well as from the regular operations of the business, should be distributed to partners' capital accounts in the profit and loss sharing ratios. After realization and liquidation has been completed and all profits and losses have been credited or charged to partners' capital accounts according to the profit and loss sharing ratios, the assets would naturally be distributable in the proportion of capital investments, because the assets would then equal the sum of the partners' capital accounts.

The following problem would be typical:

Question:

> "Upon dissolution of a partnership in which the articles of agreement did not stipulate how profits or losses were to be divided, it was found that John Doe's capital account stood credited with $50,000 and Richard Roe's with $25,000. The cash remaining on hand after all assets had been realized and all liabilities had been paid,

amounted to $59,000. How should this cash be divided between the partners?"

Answer:

"The partners' capital accounts aggregated....	$75,000.00
But the cash remaining, after realization and liquidation had been completed, amounted to only........	59,000.00
Therefore a loss may be assumed of................	$16,000.00

"Inasmuch as the partnership agreement did not stipulate how profits and losses were to be divided, they would have to be divided equally, according to the law. Therefore each partner's capital account should be charged with $8,000. This would leave a credit balance in the partners' capital accounts as follows:

John Doe..........................	$42,000.00
Richard Roe	17,000.00
Total..........................	$59,000.00

"This amount would equal the cash to be distributed.

Therefore, Doe would receive $42,000 and Roe $17,000."

This problem, as can be seen, involves a knowledge of two points in connection with partnership accounting. To a student having the necessary knowledge, the solution is simple enough.

6. How One or More Partners May be Overpaid

The foregoing remarks and illustrations in connection with partnership realization and liquidation were all founded on the assumption that all of the assets had been converted into cash before any payments were made to partners on account of capital; that the partners' capital accounts after realization and liquidation had

been completed all showed credit balances; and that the one final payment to partners closed their accounts.

It often happens, however, that only part of the assets are converted into cash at one time. It may be a long while before it is possible to collect all of the accounts and sell all of the property. In the meantime, more than enough cash may have been realized to pay off all creditors' claims and partners' loans, so that a balance will be left belonging to the partners to apply on capital accounts. In such a case the partners may decide to divide this surplus cash among themselves, as a "liquidating dividend", or, in other words, as a partial return of their capital investments. How shall it be divided, if their capital ratios differ from their profit and loss sharing ratios? It is quite obvious that it should not be distributed according to the profit and loss sharing ratios, because if it were, the partners would not get back their capital in the proportion in which they had contributed it, which would not be fair.

It is also true, but not quite so obvious, that this surplus cash should not be divided according to the capital ratios either, but by an altogether different method to be explained shortly. The reason for this is that the first payment, if made according to capital ratios, might so reduce one of the partners' credit balances, as to make it less than that partner's share of losses which might subsequently be incurred in the realization of the remaining non-cash assets. In that event when the loss was charged to the partner's account in the profit and loss sharing ratio, the credit balance would change to a debit balance. This would mean, of course, that that partner would become indebted to the firm. If, meanwhile, he had spent his first dividend, or if for any other reason he could not pay back the amount of his debit balance, the other partners would have to suffer the loss, unless the liquidator made good the overpayment.

The point may be illustrated in the following manner, assuming three partners, A, B, and C, sharing profits and losses as

follows: A, 35%; B, 25%; and C, 40%. Suppose that partial realization had taken place, that all creditors' claims and partners' loans had been paid, and that the books showed the following (taking it for granted, for the sake of simplicity, that there were no expenses of liquidation and no profits or losses in connection with the assets sold):

		Capital Accounts	
Cash	$15,000.00	A,	$ 8,000.00
Non-Cash Assets	25,000.00	B,	30,000.00
		C,	2,000.00
Total	$40,000.00		$40,000.00

If the $15,000 cash should be distributed according to capital ratios, the amount each partner would receive, and the balance of his capital account thereafter, would be as follows:

	Balance Before Distribution of Cash	CASH DISTRIBUTED Per Cent of Total	Amount	Balance After Distribution of Cash
A	$ 8,000.00	20%	$ 3,000.00	$ 5,000.00
B	30,000.00	75%	11,250.00	18,750.00
C	2,000.00	5%	750.00	1,250.00
Total	$40,000.00	100%	$15,000.00	$25,000.00

Now suppose that the non-cash assets of $25,000 subsequently realized only $20,000, the loss of $5,000 would, according to the rule already stated, be charged to the various partners' accounts according to their profit and loss sharing ratios. The charge to each and the capital accounts after the charge was made would, therefore, be as follows:

	Balance Before Charging the Loss of $5,000	LOSS CHARGED Per Cent of Total	Amount	Balance After Charging the Loss of $5,000
A	$ 5,000.00	35%	$1,750.00	$ 3,250.00

B	18,750.00	25%	1,250.00	17,500.00
C	1,250.00	40%	2,000.00	Dr. 750.00
Total	$25,000.00	100%	$5,000.00	$20,000.00

7. How Partners Would Share Loss Due to Overdraft of Partner's Account

At this point it is appropriate to explain how the $20,000 should be divided between A and B in case C failed to return the amount overpaid him ($750). This $750 would constitute a loss the same as any other loss, and would, therefore, be chargeable to A and B in their profit and loss sharing ratios. While C was a factor in the combination, A's proportion of the profits and losses was 35% and B's 25%, or together 60%. Therefore with C eliminated, A's proportion becomes 35/60, or 58.33%, and B's 25/60, or 41.67%.

The accounts of A and B, after the loss had been charged, would appear as follows and the $20,000 would be divided between them according to their balances after charging the loss of $750 as follows:

	Balance Before Charging the Loss of $750	LOSS CHARGED Per Cent of Total	Amount	Balance After Charging the Loss of $750
A	$ 3,250.00	58.33%	$437.48	$ 2,812.52
B	17,500.00	41.67%	312.52	17,187.48
Total	$20,750.00	100 %	$750.00	$20,000.00

8. How to Guard Against Overpaying a Partner

It does not necessarily follow that if the first payment is made according to the capital ratios, one or more of the partners will be overpaid. Everything depends upon the amount of the first payment and the amount of losses sustained subsequently on the realization of the remaining assets. As long as the first (or subsequent)

payment did not reduce the balance of any partner's capital account below the amount of the loss subsequently sustained, no harm would have been done. But to guard against such a possibility certain measures should be taken.

The usual method employed is to distribute the first dividend in such a way as to change the capital accounts so that the capital ratios will be the same as the profit and loss sharing ratios. Then from that time on, there could be no danger of overpaying any partner, because as assets shrank (through losses in realization), the capital accounts would correspondingly shrink, each partner's account according to his share of the loss, and as assets diminished (by being distributed as dividends) the capital accounts would diminish, each partner's account according to the amount he received. Thus no partner's account could develop a debit balance. The reason why no partner's account could develop a debit balance by being charged with losses if the capital ratios were the same as the profit and loss sharing ratios, can be the more easily remembered if you think of what would happen if *all* the assets were lost.

In such a case the loss would, of course, be charged to the partner's capital accounts in the profit and loss sharing ratios. But as these would be the same as the capital ratios, the debit to each partner's capital account would exactly equal the credit balance and close the account. If charging off a total loss of assets would not develop a debit balance in any partner's account, charging off a partial loss in the same ratio certainly would not.

It is not always possible, however, to effect the desired change in capital ratios to agree with profit and loss sharing ratios by the first payment. It might take two or more payments to do it, but it could be done in time.

To explain a practical method of safeguarding against overpaying any partner when capital is returned on the installment plan, and when the capital accounts are not in the profit and loss sharing ratios, we will assume four partners sharing profits and losses as

follows: A, 20%; B, 30%; C, 40%; D, 10%. We will also assume that their books show the following (after all liabilities have been paid):

		Capital Accounts	Capital Ratios
Sundry Assets	$100,000	A $ 40,000	40%
		B 15,000	15%
		C 6,000	6%
		D 39,000	39%
Total.....	$100,000	$100,000	100%

If, in winding up the business, all the assets were found to be worthless, there would be a loss of $100,000, which would have to be charged to the various partners in the profit and loss sharing ratios. Their capital accounts before and after writing off this loss would, therefore, be as follows:

	Balances Before Writing Off the Assets	CHARGED TO CAPITAL ACCOUNTS		Balances After Writing Off the Assets
		Per Cent	Amount	
A	Cr. $ 40,000.00	20	$ 20,000.00	Cr. $ 20,000.00
B	Cr. 15,000.00	30	30,000.00	Dr. 15,000.00
C	Cr. 6,000.00	40	40,000.00	Dr. 34,000.00
D	Cr. 39,000.00	10	10,000.00	Cr. 29,000.00
Total........	$100,000.00	100	$100,000.00	

This would show B and C indebted to A and D. Now if we consider the accounts of B and C as worthless, this loss ($49,000) would have to be absorbed by A and D in the proportion of A, 20/30 (or 2/3), and D, 10/30 (or 1/3). If this additional loss were charged properly, the capital accounts of the partners would then appear as follows:

	Balances Before Writing Off the Accounts of B and C	POSTED TO CAPITAL ACCOUNTS Per Cent	Amount	Balances After Writing Off the Accounts of B and C
A	Cr. $20,000.00	66⅔	Dr. $32,666.67	Dr. $12,666.67
D	Cr. 29,000.00	33⅓	Dr. 16,333.33	Cr. 12,666.67
B	Dr. 15,000.00		Cr. 15,000.00	
C	Dr. 34,000.00		Cr. 34,000.00	

and A would owe D $12,666.67.

If we next consider as "pure gain" whatever cash is realized from assets that were written off as worthless, this cash would be credited to the partners' capital accounts in the profit and loss sharing ratios. But the amounts credited to B and C should not be paid to them, but should be transferred to the credit of A and D in the proportion of 2/3 to A and 1/3 to D, until the amounts transferred from B's account equalled $15,000 and the amounts transferred from C's account equalled $34,000 (the amounts previously absorbed by A and D).

To carry out the above procedure, open memorandum accounts with A, B, C, and D. Only the cash distributed or actual losses charged on account of realization and liquidation, should be posted to the regular capital accounts.

To illustrate the memorandum accounts and installment payments, let us assume three cash dividends as follows:

1st	$50,000.00
2nd	25,000.00
3rd	20,000.00
Total............	$95,000.00

and the balance, $5,000, as representing losses on realization and expenses of liquidation. The memorandum accounts would, in this event, appear as follows:

A

20% of assets written off	$20,000.00	Original balance	$40,000.00
⅔ of B's account	10,000.00	20% of first dividend ($50,000.00)	10,000.00
⅔ of C's account	22,666.67	Transfer from B's account	10,000.00
Cash disbursement to balance	20,666.66	Transfer from C's account	13,333.33
	$73,333.33		$73,333.33
Cash disbursement to balance	$11,666.67	20% of second dividend ($25,000.00)	$ 5,000.00
		Transfer from C's account	6,666.67
	$11,666.67		$11,666.67
Cash disbursement to balance	$ 6,666.67	20% of third dividend ($20,000.00)	$ 4,000.00
		Transfer from C's account	2,666.67
	$ 6,666.67		$ 6,666.67

B

30% of assets written off	$30,000.00	Original balance	$15,000.00
		Charged to A, $10,000.00 " to D, 5,000.00	15,000.00
	$30,000.00		$30,000.00
Credited to A, ⅔	$10,000.00	30% of first dividend ($50,000.00)	$15,000.00
" to D, ⅓	5,000.00		
	$15,000.00		$15,000.00
Cash disbursement to balance	$ 7,500.00	30% of second dividend ($25,000.00)	$ 7,500.00
Cash disbursement to balance	$ 6,000.00	30% of third dividend ($20,000.00)	$ 6,000.00

C

40% of assets written off	$40,000.00	Original balance	$ 6,000.00
		Charged to A, $22,666.67 " to D, 11,333.33	34,000.00
	$40,000.00		$40,000.00
Credited to A, ⅔	$13,333.33	40% of first dividend ($50,000.00)	$20,000.00
" to D, ⅓	6,666.67		
	$20,000.00		$20,000.00
Credited to A, ⅔	$ 6,666.67	40% of second dividend ($25,000.00)	$10,000.00
" to D, ⅓	3,333.33		
	$10,000.00		$10,000.00
Credited to A, ⅔: $2,666.67 Credited to D, ⅓: 1,333.33	$ 4,000.00		
Cash disbursement to balance	4,000.00	40% of third dividend ($20,000.00)	$ 8,000.00
	$ 8,000.00		$ 8,000.00

D

10% of assets written off	$10,000.00	Original balance	$39,000.00
⅓ of B's account	5,000.00	10% of first dividend ($50,000.00)	5,000.00
⅓ of C's account	11,333.33	Transfer from B's account	5.000.00
Cash disbursement to balance	29.333.34	Transfer from C's account	6,666.67
	$55,666.67		$55,666.67

Cash disbursement to balance	$ 5,833.33	10% of second dividend ($25,000.00)	$ 2,500.00
		Transfer from C's account	3,333.33
	$ 5,833.33		$ 5,833.33
Cash disbursement to balance	$ 3,333.33	10% of third dividend ($20,000.00)	$ 2,000.00
		Transfer from C's account	1,333.33
	$ 3,333.33		$ 3,333.33

These memorandum accounts are not general ledger accounts. They are in the nature of work sheets to calculate how the various installments of cash to be distributed, should be paid to partners. The foregoing shows that the three installments should have been paid as follows:

Installment	Total	A	B	C	D
1st	$50,000.00	$20,666.66			$29,333.34
2nd	25,000.00	11,666.67	$ 7,500.00		5,833.33
3rd	20,000.00	6,666.67	6,000.00	$4,000.00	3,333.33
Total....	$95,000.00	$39,000.00	$13,500.00	$4,000.00	$38,500.00

The regular capital accounts in the ledger would show as follows:

	Total	A	B	C	D
Balances before installment payments..	$100,000.00	$40,000.00	$15,000.00	$6,000.00	$39,000.00
Less installment payments....................	95,000.00	39,000.00	13,500.00	4,000.00	38,500.00
Balances after installment payments..	$ 5,000.00	$ 1,000.00	$ 1,500.00	$2,000.00	$ 500.00
Capital ratios....................		20%	30%	40%	10%

The capital ratios are now the same as the profit and loss sharing ratios. It was not possible to change the capital ratios so as to equal the profit and loss ratios until the third installment payment.

We have assumed that the balance of $5,000 was the actual loss due to realization and liquidation. This loss, when charged to the partners in the profit and loss sharing ratios, would close all the accounts. Suppose, however, that all of the $5,000 was realized and distributed in the profit and loss sharing ratios. In that case, each partner's capital account would be charged with the same amount as before. The only difference would be that the charge would represent cash actually distributed to partners rather than book entries for a loss.

In our example, C, with a balance of $6,000 to his credit, had a capital ratio of 6% when the dissolution proceedings began, as compared with a profit and loss sharing ratio of 40%. He did not share in any of the dividends until the third, which finally adjusted his capital ratio to 40%.

If a loss of over $15,000 had been sustained, the other partners could not have prevented C's account from developing a debit balance, because 40% of $15,000 is $6,000, and that is all C had invested in the business. The best they could have done under such circumstances would have been to prevent his receiving any of the cash that was realized from the sale of assets.

If any of the partners should object to the plan of paying partial dividends in the manner outlined above to prevent overpayments, the liquidator, in order to protect himself, might not pay any dividend at all until he could determine definitely the amount of loss in connection with the dissolution proceedings.

If the first dividend adjusts the capital ratios to the profit and loss sharing ratios, all future distributions may be made according to the capital ratios without fear of overpaying any partner. Otherwise one should proceed with the plan of keeping memo-

randum accounts, until the regular capital accounts are adjusted to the profit and loss ratios.

9. Repayment of Partners' Loans

After creditors have been paid, it is in order to repay partners' loans, but if a partner is indebted to the firm on account of having overdrawn his capital account or in any other way, and the firm is indebted to him for a loan, the loan could be applied against a reduction of the partner's indebtedness. This power of offsetting one obligation against another should prompt the liquidator to use caution against paying a partner's loan in full, even when there was cash enough to do so, before it became certain that that partner's share of losses due to liquidating the business could not exceed the credit balance of his capital account.

10. Summary Review.

What has been said on the subject of partnership accounting may be summed up as follows:

(1) That the distinctive feature of partnership accounting lies in the entries necessary to adjust the partners' various accounts in accordance with the terms of the articles of partnership, or according to the law. Otherwise the accounting for a partnership is substantially the same as the accounting for any other form of organization.

(2) That an accountant is interested in certain phases of partnership law, because the law dictates terms or conditions, when the partnership agreement is silent on certain subjects. For example, the law says that the capital interests of all partners are alike, and that profits and losses shall be divided equally, when the articles of agreement do not stipulate to the contrary.

(3) That, in liquidating a partnership, assets should be

applied in the order of (a) outside creditors, (b) partners' loans, and (c) partners' capital, any excess to be divided among the partners the same as profits.

(4) That the partnership form of organization is founded on the personal relationship of the various members, for which reason it has certain disadvantages because one partner may, in the ordinary conduct of business, bind all the other partners; because a partner's personal property may be called upon to pay the firm's debts, if necessary; and because the organization is always in danger of being dissolved by the death of a partner or by other causes.

(5) That the principal partners' accounts are their Drawing, Loan, Salary and Capital accounts.

(6) That the partners' profit and loss sharing ratios may differ from their capital ratios.

(7) That at the formation of a partnership, each partner's capital account should be credited with his net capital contribution to the business.

(8) That good-will, although an intangible asset, may be bought and sold, the purchase price being based, usually, on the profits of a given number of years, after deducting interest on capital investment and reasonable compensation for managerial services.

(9) That a good-will account should not be set up arbitrarily (with a credit to Profit and Loss) but should be opened only when good-will is actually bought or sold.

(10) That in the admission of a new partner, the distinction between "buying an interest" in the firm and "making an investment" in it, should be borne in mind, as the former may involve the opening of a good-will account and the latter would not.

(11) That interest on capital accounts and partners' salaries, when applied toward making up for inequalities in respect to capital investments, are considered as partial distributions of profits and not as interest nor salary expense.

(12) That the principle involved in "averaging" an account is based on an axiom such as this. "The interest on $1,000 invested for thirty days at 6%, equals the interest on $30,000 invested for one day at the same rate." When all entries are reduced to principal per the same unit of time, the principals can be added and the entries thus averaged.

(13) That the realization and liquidation of a partnership means reducing all assets to cash, and distributing the cash to whom it belongs, either to outside creditors or to partners.

(14) That as soon as dissolution is agreed upon, the books should be closed and partners' accounts adjusted accordingly.

(15) That profits and losses from realization and expenses of liquidation should be borne by the partners according to their profit and loss sharing ratios.

(16) That if a liquidator wishes to protect himself against overpaying a partner in making partial payments, when the profit and loss sharing ratios differ from the capital ratios, he must pay the dividends in such a way as to change, as soon as possible, the capital ratios to the profit and loss ratios.

(17) That loans from partners may be applied to offset amounts which they may owe to the firm.

QUESTIONS

LESSON 30

1. Assume that A, B, and C, partners, agreed to allow interest on capital accounts at the rate of 6% per annum, computed on the balances of the capital accounts at the beginning of the year, and that each partner contributed no additional capital and kept his agreement not to withdraw any capital during the year. At January 1, their capital accounts showed credit balances as follows: A, $10,000; B, $8,000; and C, $4,000. Their profit and loss sharing ratios were as follows:

A, 50%; B, 20%; and C, 30%.

If the bookkeeper made a mistake and charged the interest allowed on partners' capital accounts to Interest Expense account, and if the error was not discovered, and if the final profit for the year, per the Profit and Loss account, amounted to $5,620.00, state the percentage of increase for the year in each partner's capital account after the profit of $5,620 had been distributed. Show how you arrived at your results and explain how (if at all) the amounts of the credit balances of the capital accounts should be adjusted at the end of the year on account of the bookkeeper's error.

2. In Lesson 29 it is stated that "If the capital ratios are the same and the profit and loss sharing ratios are unequal, the partner with the smallest profit and loss sharing ratio will benefit by an agreement to allow interest on capital accounts." Why is this so?

3. In Lesson 29 it is stated that "If the profit and loss sharing ratios are the same and the capital ratios are unequal the partner contributing the most capital will benefit by an agreement to allow interest on capital accounts." Why is this so?

4. When are partners' salaries considered an expense of the business, and when are they considered distribution of profit?

5. Submit proof that a partner can actually lose money by an agreement to allow interest on partners' capital accounts, even though he has the largest capital investment.

6. What do the words "Realization and Liquidation" signify?

7. How should profits or losses from realization and liquidation be shared by partners?

8. A, B, C, and D are partners sharing profits and losses in the following ratios: A, 30%; B, 4%; C, 50%; and D, 16%.

C dies and the surviving partners decide to discontinue business rather than to form a new partnership. After the books are closed, it developes that A has overdrawn his capital account and is indebted to the firm in the amount of $6,500, which cannot be collected. Submit the journal entry to adjust the books accordingly.

9. The firm of Smith, Brown, Jones & Wilson, sharing profits and losses in the ratios of 25%, 25%, 15% and 35% respectively, decided to wind up their affairs on July 1st, at which date there was more than sufficient cash to pay off all of the creditors. They were paid during the month of July. No assets were sold during July. On August 1st, there were non-cash assets to the amount of $133,000, and cash to the amount of $10,000. The partners' accounts at this same date showed the following balances:

Smith,	Drawing account	(Debit)	$15,000
Smith,	Capital account	(Credit)	45,000
Brown,	" "	"	60,000
Jones,	" "	"	13,000
Wilson,	" "	"	40,000

All of the assets were sold for cash before September 30. From the following transcript of their cash account, prepare transcripts of partners' capital accounts, assuming that the liquidator adopted the plan outlined in the text as a precaution against overpaying any of the partners, and that all of the accounts on the books were finally closed at September 30.

Partners' capital accounts were charged with amounts distributed as liquidating dividends on the dates the dividends were paid.

Show how you arrived at the amounts paid as liquidating dividends to each partner.

CASH ACCOUNT

Aug. 1	Balance	$10,000.00	Aug. 8	Sundry expenses	$ 140.00
Aug. 5	Sale of assets	5,000.00	Aug. 10	Paid to partners	12,000.00
Aug. 16	" " "	50,000.00	Aug. 15	Sundry expenses	58.00
Sept. 3	" " "	45,000.00	Aug. 18	Paid to partners	52,000.00
Sept. 28	" " "	30,000.00	Aug. 31	Sundry expenses	50.00
			Sept. 3	Paid to partners	40,000.00
			Sept. 15	Sundry expenses	190.00
			Sept. 30	" "	250.00
			Sept. 30	Paid to partners	35,312.00
	Total	$140,000.00		Total	$140,000.00

10. Referring to Question 2 preceding, show how your answer would work out, assuming three partners, A, B, and C, each having a capital investment of $10,000, the interest rate being 6%. Assume profit-sharing ratios as follows: A, 50%; B, 30%; C, 20%.

11. Referring to Question 3 preceding, show how your answer would work out, assuming three partners sharing profits and losses equally and with capital investments as follows: A, $10,000; B, $8,000; and C, $7,000. Assume an interest rate of 6%.

12. Make an outline of Lessons 27 to 30 (both inclusive) in accordance with the rules on how to study explained in Volume 1. Do not make an outline of each lesson separately, but consider the four lessons as one.

LESSON 31

CORPORATIONS
ORGANIZATION, MANAGEMENT AND STOCK RECORDS

1. Introductory

What follows in connection with the organization and management of corporations is preparatory to an explanation of the distinctive features of corporation accounting.

2. The Advantages of the Corporate Form

Of the three principal forms of organization, the corporation is undoubtedly the most desirable for the conduct of business on a large scale, all things being considered.

This is due chiefly to the facts that:

(1) The owners enjoy limited liability.

(2) The business is not dissolved at the death of an owner; neither can it be dissolved at the will of an owner, unless that owner owns a stated majority or all of the stock. It used to be generally true that a corporation could not be dissolved except by the unanimous consent of all the stockholders but at the present time the dissolution may be effected in most states (by due process of law) by a designated majority. In New York state there must be a two-thirds majority.

(3) Because of the foregoing reasons, a larger amount of capital can usually be attracted to the enterprise than could be obtained by a sole proprietor or by a partnership.

Few business men would attempt to build an organization like the United States Steel Corporation, or the Standard Oil Company,

unless they felt sure that they could raise sufficient capital for the purpose. Of course, these concerns are the result of years of growth, but even corporations just starting may require a large capitalization. Others, beginning in a smaller way, usually have in mind the possibilities or probabilities of future expansion.

Capital for the launching of a corporation is usually obtained by inducing a great many persons to invest in the business. Thus the ownership would naturally be represented by a large number of investors. If an investor in any one of our well known big corporations could be held responsible for certain business acts of all other investors, or if his private property could be taken for the payment of the company's debts in case of insolvency, do you suppose that anyone would care to become an investor?

On the other hand, looking at the situation from the point of view of the company itself, imagine the difficult problems facing the managers if the danger were ever present that the company would be dissolved by the death of an investor. No far-reaching policy could, with safety, ever be undertaken. Furthermore, think of the almost endless confusion and interruptions, if the business were obliged to make an accounting to the estate of every investor who chanced to die.

To protect business from the embarrassments mentioned in the foregoing paragraphs and for other reasons, laws have been passed making it possible for investors to organize under the corporate form of organization and to avoid the personal responsibilities and liabilities inherent in a partnership.

Of course there are certain disadvantages in incorporating, incidental to government control, such as the paying of certain taxes and the making out of certain reports which are not required of a sole trader or of a partnership, but judging from the large number of incorporations, the disadvantages are far outweighed by the advantages.

3. Corporation Defined

In the first lesson a corporation was defined as "a business owned by an aggregate of persons known as stockholders whose interests are measured by the number of shares of capital stock held by each." We may now draw the definition more finely. As a matter of fact, a corporation can be owned by one person as the result of having all stock assigned to that person after incorporation.

A corporation derives its rights and powers from the state in which it is "incorporated." A corporation is what is known as an "artificial" person having a personality quite distinct and apart from the investors who own and control it. A partnership, it may be mentioned by way of contrast, is considered by law to consist solely of the members who compose it. A partnership must sue and be sued in the name of the individual partners. Furthermore, partners can not sue the firm nor can the firm sue any partner. Not so with the corporation. As an "artificial" person, it may enter into a contract with, or sue any of its individual owners; or it may in turn be sued by any of its owners.

The corporation may then be defined as an artificial person deriving its powers from the state, but owned and controlled in respect to its business management by one or more natural persons. The natural owners are called stockholders, the extent of their ownership being measured by the number of shares of stock held by each. These shares of stock are transferable at will from one person to another without affecting the status of the corporation as a going concern.

4. Kinds of Corporations

Corporations may be divided into:

I. Public

- A. Cities
- B. Villages
- C. Townships

II. Private
  A. Stock
    (1) Most commercial enterprises
  B. Non-Stock
    (1) Churches
    (2) Clubs
    (3) Charitable Institutions
    (4) Etc.

In this course only private stock corporations will be discussed.

5. How the Corporation is Organized

While a partnership, provided its object is not contrary to the law, may be undertaken without any particular formalities outside of the articles of agreement, a corporation cannot be formed until a charter has been granted by the state in which the business wishes to incorporate.

To secure a charter the incorporators, or persons who desire to form a corporation, first make out and sign a charter. The charter usually includes, among other things, the following:

(1) The name of the proposed corporation.
(2) Where its principal office will be located.
(3) The object of the business.
(4) The rights and powers which the incorporators wish conferred upon the new enterprise.
(5) The total amount of capital which the incorporators wish to be authorized to raise, if necessary, and the kinds and par value of stock to be issued.
(6) The names and addresses of the incorporators and the number of shares subscribed by each, also the names of the directors for the first year. Most states require that there shall be at least three incorporators and at least three directors.

If the object of the corporation is legal and the necessary papers are made out in proper form, the charter is usually accepted

by the Secretary of State upon receiving evidence of the payment of the incorporation fee. Usually the law requires that a copy of the charter be filed in the office of the clerk of the county in which the corporation has its headquarters.

The corporation must conduct its business within the limits of the charter, expressed or implied therein, except that an amendment may usually be secured when the business wishes to enlarge or otherwise modify its activities. The charter is sometimes called the "certificate of incorporation." The details of corporation law will be more fully discussed in the law lessons.

6. How the Corporation is Managed

A sole proprietor usually manages his own business, although, of course, as he owns it, he can delegate his authority to anyone he wishes. A partnership is generally conducted by the partners themselves, acting in various capacities. A corporation, however, is seldom managed directly by its owners. In fact, one of the advantages of a corporation, from the viewpoint of certain investors at least, lies in the fact that they can invest their money without incurring the personal responsibility of looking after any of the details of the business.

The control over the operations of a corporation is vested by the stockholders in a representative body called the Board of Directors. They in turn elect officers of the company to be responsible for the executive control. The Board of Directors usually formulate the business policies of the organization, but leave the active management of affairs to the officers.

The principal officers of a corporation are the president, one or more vice-presidents, the treasurer and the secretary. The president is directly responsible to the Board of Directors, the other officers are usually responsible to the president. The directors seldom come in contact with the office personnel. In fact, it is not unusual for the rank and file of the employees of a corporation not to know even the names of their directors.

7. By-Laws and Delegation of Authority

A corporation, as stated before, is subject to the general law of the state that created it, and more specifically to the provisions of its charter. There is a third body of law, however, to which the directors and officers of a corporation must conform, which is the "By-Laws."

The By-Laws are a set of rules and regulations adopted by the stockholders at their first meeting after the corporation is organized, unless they delegate the task to the directors.

The stockholders, or owners, after they have stated in a general way through their By-Laws, how they wish the corporation managed, and after they have elected a Board of Directors as their representatives, retire from the scene until the next meeting, generally a year later, when it is usually in order to elect new directors or to vote on some extraordinary matter. The Board of Directors, after it has been elected, becomes the central figure, responsible only to the stockholders. The Board, however, delegates certain authority to the officers, who, in turn, pass duties on down to subordinates. Thus the whole organization is honeycombed with responsibility to the "man higher up."

8. Distribution of Profits

Although the profits of the corporation belong to the stockholders, no distributions thereof can be made except by authority of the Board of Directors. This authority is granted by a resolution of the board to "declare a dividend," amounting to a certain percentage of the par or face value of the stock or to a certain amount per share. The amount of a dividend received by each stockholder depends, therefore, upon the number of shares of stock which he holds.

Even when there are profits the directors are not usually obliged to declare dividends, nor are they necessarily governed by the amount of profits earned in deciding upon the amount to de-

clare. In a partnership, as has been said, each partner receives his full share of the entire profits earned for the accounting period, unless the partners themselves agree to leave some of it in an Undistributed Profits account. But in a corporation the owners receive what the Board of Directors decide to give them. This is seldom the whole amount of profits earned. The directors as a rule purposely withold a certain portion to build up a "surplus." If the directors declare a dividend when there are not sufficient profits for the period nor sufficient accumulated surplus and it is paid, they may be held personally liable for the deficiency. This is spoken of as paying dividends "out of capital." If a dividend is declared it becomes a liability of the corporation immediately, even though it may not be payable until several weeks later.

9. Shares of Stock

When an individual contributes capital to a partnership, he becomes known as a partner and his interest in the business is evidenced by a credit in a ledger account bearing his name. When an investor contributes capital to a corporation, he receives as evidence of his interest in the business, a piece of paper called a certificate of stock. This certificate acknowledges that he is the owner of a certain number of shares of capital stock of the corporation. If the par, or face value, of the stock is $100 and the investor contributes $1,000 he usually receives a certificate for ten shares, although he might, for instance, receive five certificates for two shares each. Such evidences of ownership are transferable from one individual to another by endorsement. Thus if an owner wishes to dispose of his stock, he may do so by writing on the back of the certificate the name of the person to whom he wishes it to be transferred. In this case, the certificate should be sent to the corporation and cancelled, after which a new certificate will be issued in the name of the new owner. This is necessary because the corporation will pay dividends only to those shareholders whose names are recorded on the corporation's books as of a given date,

usually a short time before the dividend is payable. The new owner to protect himself would ordinarily see that the corporation duly records the transfer.

There are occasions when a purchaser will buy stock, intending to sell it within a short time and before the next dividend date. In that case he may ask the person from whom he bought the certificate, to endorse it "in blank," in order that he may pass it on to a third party without going through the formalities of having his name recorded on the corporation's books. This procedure is common in connection with purchases and sales of stock for speculation.

No account is opened in the general ledger of a large corporation with each stockholder to correspond with partners' capital accounts in a partnership, but there is an account, usually called capital stock account, representing the aggregate amount of stock issued to all stockholders. In a small corporation there may be general ledger accounts for individual stockholders, but if there are such accounts in a large corporation, it is the exception rather than the rule.

Every corporation is required to keep an account with each stockholder, but these accounts are usually to be found in a special book called the Stock Ledger. The Stock Ledger generally shows only the number of shares of stock held by each stockholder, and not the amount of his interest in the business expressed in dollars and cents.

The stock certificate shows, among other things, the name of the corporation, the amount of its authorized capital stock, the kind of stock (which will be discussed in Lesson 32), the total number of shares represented by the certificate, the person to whom the certificate was issued and whether or not he paid for it in full. Sometimes stock is issued before it is fully paid, in which case it is subject to "calls" for further payments from the owners, as the directors may demand, until the stock is 100% paid. A stockholder

may lose all the money he invests in a certificate, if the corporation becomes bankrupt, but he cannot, under the laws of most states, be required to pay any more, regardless of how much the corporation may owe. This is what is meant by the restricted liability of a stockholder. An exception to this rule applies to a holder of bank stock who, as a rule, is obliged to assume a "double liability," that is to say he may be called upon, in case of insolvency, to pay into the bank an additional amount equal to the par value of his holdings, but even in a case like this, the liability is limited to a certain definite amount. California applies the "double liability" rule to all corporations.

Following is an illustration of a stock certificate:

"Par Value $10 Each *Par Value $10 Each*

THE BLANK OIL COMPANY
Incorporated under the laws of the State of Texas

This certificates that........James Alexander........*is the owner of* ....One Hundred........*fully paid and non-assessable shares, of the par value of $10 each of the capital stock of the Blank Oil Company, transferable in person or by duly authorized attorney upon surrender of this certificate properly endorsed. This certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.*

In witness whereof the company has caused this certificate to be signed by its duly authorized officers and its corporate seal to be hereunto affixed this....................*day of*..........................., *192*.....

....

Assistant Secretary *Vice-President"*

The stock certificate usually provides (along the sides) for the signatures of the registrar and of the transfer agent, besides for the signature of officers of the company as shown in the foregoing illustration of a stock certificate. The signature of the registrar signifies that the certificate is genuine, and the signature of the

transfer agent that the transfer has been duly recorded on the books of the company.

Following is an illustration of an assignment of stock from one person to another, which may appear on the back of a certificate:

"For value received....................hereby sell, assign and transfer unto

....

....

....

...................................shares of the capital stock represented by the within certificate and do hereby irrevocably constitute and appoint ....attorney, to transfer the said stock on the books of the within named company with full power of substitution in the premises.

In the presence of...

Dated..192....."

The par value of a certificate of stock is the value arbitrarily given to it by the corporation, subject, of course, to state regulations. The State of New York, for example, allows a corporation to issue stock of any par value, except that when mentioned the par value must not be more than $100, nor less than $5.00. New York also allows stock to be issued without par value.

The usual par value is $100. The total amount of stock a corporation is authorized to issue and the par value of the shares, are set forth in the articles of incorporation. Thus the articles of incorporation might state that a corporation was organized with a total capital stock of $1,000,000 divided into 10,000 shares of $100 each.

10. The Minute Book

A minute book is a book containing a record in narrative form of what happens at meetings of a representative body of men. As

applied to corporations, it is a book recording the business transacted at meetings of the stockholders, or of the board of directors, or of special committees. It is usual to find in a small corporation the same book used for stockholders' and directors' meetings, and in the larger corporations, separate minute books.

The minutes are written up by the secretary and include, among other things, the time and place of the meeting, who were present, who presided, and what was done. Resolutions passed at a meeting are not valid, unless enough members are present to constitute a "quorum." The usual quorum consists of a bare majority, but the by-laws may specify an even greater percentage of membership. One of the first things done at a meeting is to read and approve (possibly with corrections) the minutes of the previous meeting. Anything contained in the minutes as approved is considered official and legally binding on the corporation. Consequently, an auditor should read the minutes before he renders a report. He will find therein mention of contracts, dividend declarations, and other things that may have a direct bearing on the balance sheet or statement of income and profit and loss.

The first few pages of a minute book may be reserved for a copy of the charter and the by-laws.

11. Books and Records Relating to Stock

The following are the principal books and records relating to the issue and transfer of stock certificates:

Stock Certificate Book
Stock Transfer Book
Register of Transfers
Stockholders' Ledger
Subscription Lists
Installment Receipts and Stock Scrip
Installment Book

12. Stock Certificate Book

This is a book containing blank certificates of stock, usually arranged like a check book with stubs. As a certificate is detached to be issued to a stockholder, the name of the person to whom it was issued and the number of shares represented by the certificate are entered on the stub.

13. Original Issue of Stock

Authorized capital means the maximum amount of capital stock of *original issue* which a company is allowed by its charter to sell. It does not follow, however, that a corporation is obliged to issue this full amount. Oftentimes, incorporators ask for an authorization far in excess of the capital which they need at the start. This is done in order to provide a means for raising additional capital in the future, without being obliged to seek an amendment of the articles of incorporation.

Stock of "original issue" is that stock which, when issued, increases the measure of ownership of the business, as contrasted with that stock which is issued in recognition of a transfer of ownership from one stockholder to another. For example, A may pay into the company $10,000 for 100 shares of capital stock. Provided the stock issued to him had not been donated to the company by a previous owner or had not been purchased by the corporation after it had been issued, the amount received from A would go to increase the accountability of the company to its stockholders by $10,000, and therefore A's stock would be of original issue. If later A should sell his stock to B, that would be merely a transfer of title from one individual to another, in which the corporation would not be primarily concerned. However, the corporation, if requested to do so, would be obliged to give effect to this transfer on its records by cancelling the certificate made out in the name of A and issuing a new certificate to B. But the certificate issued to B in this case, would not be of "original issue." New certificates

in exchange for old can be issued indefinitely without affecting the total capitalization of the business.

It not infrequently happens that some of the incorporators who have received stock in exchange for property sold to the new corporation, will return a portion of it as a gift to be re-sold by the company for the purpose of raising cash for "working capital." Although the proceeds of this stock belong to the company, the new certificates issued would not represent stock of original issue.

The amount realized from the sale of donated stock is pure gain for the corporation. It does not go toward increasing its accountability to stockholders on capital account.

14. Stock Transfer Book

Some states require transfers of stock from one holder to another to be recorded in a Stock Transfer book. In other states, the indorsement on the back of the stock certificate is considered as sufficient authority for the company to cancel the certificate and issue a new one. As the Stock Transfer book is practically a duplication of the assignment on the back of the certificate, it hardly seems necessary to keep such a record in states where the law does not require it.

It will be noticed that the form on the back of the certificate (see Section 9) provides space for the name of the person to whom the certificate is assigned by the owner, and also the name of the person appointed by him as attorney, with authority to make the transfer on the books of the company.

Usually stock certificates are signed in blank, so that when the certificate reaches the company, the name of one of its officers or the name of the transfer agent, can be inserted as attorney to effect the transfer.

As the form of Stock Transfer is very similar to the assignment form shown in Section 9, it is not reproduced here. Usually several of these transfer forms are printed on the same page of the

transfer book. In other words, the transfer book is nothing more than a book to record in an official way the transfer of stock, with several transfers appearing on each page.

The stock transfer book is generally "closed" a stated number of days before the annual meeting of stockholders, and also before the date when a dividend becomes payable. It usually remains "closed" for a fixed period, which means that during that time no stock can be transferred on the records of the company. Consequently, purchasers of stock during the time the transfer books are closed, must wait until they are open again before they can have their ownership officially recognized.

The object of shutting off transfers for a certain length of time is this. The company has to do considerable work in getting up lists of stockholders in connection with the sending out of notices of the annual meeting, or other meetings, and also in preparing checks in payment of dividends. Therefore it advertises the fact that only those persons whose names appear on its stock records as at a given date shall be considered stockholders entitled to vote at the stockholders' meeting, or to participate in a dividend payable at such and such a time.

15. Register of Transfers

The stock transfer book is the official record of the assignment of stock from one holder to another. The Register of Transfers is a sort of summary of these assignments ruled in columnar form. These columns may provide for transfer number, date of transfer, name and address of transferor, the number of shares transferred, the number of the certificate cancelled, the number of the new certificate issued, the name and address of the transferee (the person to whom the new stock is issued), and any other information desired. Such a register assumes the characteristics of a journal, from which entries can be posted to the stock ledger, debiting the stock account of the transferor with the number of shares which he

assigned, and crediting the stock account of the transferee with the number of shares which he received.

It may happen that a stockholder, owning a certificate for 100 shares, may wish to sell, or otherwise part with, only a portion of his holding, say 50 shares. This can be done by having the company cancel the certificate for 100 shares and issuing two new certificates for 50 shares each in exchange, one to the original holder and the other to the transferee. The contrary of this situation also sometimes arises. Several certificates representing varying numbers of shares may be surrendered in exchange for one certificate for the total number. The transfer office of a large corporation whose stock is dealt in actively on the New York or other Stock Exchanges, is kept pretty busy recording transfers.

An auditor in accounting for stock supposed to be owned by a business as of a certain date, may find it necessary to secure a confirmation from the transfer agent that a certain number of shares were in his hands at that time, in process of being transferred. This is particularly true in audits of stock brokerage houses.

In a small corporation the register of transfers may not be necessary. Postings to the stock ledger may be done directly from the stock transfer book or even from the stubs of stock certificates. But in a large corporation where this method of posting would be inconvenient, owing to the great volume of transactions, a register of transfers may usually be found. Stock transfers are subject to tax. The tax is paid to the government through the purchase of revenue stamps. The stamps are usually pasted on the stubs of the stock certificate books, which makes it easy for an inspector to audit the records to see that the tax is not evaded.

An illustration of a register of transfers is as follows:

No. of Ctf.	No. of Shares	Date of Ctf.	To Whom Issued	By Whom Assigned	Date of Assignment	Date of Filing

16. Stockholders' Ledger

A stockholders' ledger is a ledger (bound, loose-leaf, or card) containing an account with each stockholder, showing both name and address. This account records the stockholders' transactions in respect to both purchases and sales of the company's stock.

A stockholders' ledger account differs from an ordinary ledger account in general design, and also because it forms no part of the trial balance of the general books. It is more or less of a memorandum record, but is subject to control in that the aggregate number of shares owned by all stockholders must equal the total number of shares issued.

Following is an illustration of a stock ledger, omitting the name and address of the stockholder at the top:

When Issued	No. of Ctf.		From Whom Received	Page	No. of Shares	Balance
	Old	New				

(Left Side)

When Cancelled	No. of Ctf.		To Whom Transferred	Page	No. of Shares	Remarks
	Old	New				

(Right Side)

Whatever variations there may be in detail of design, all stockholders' ledgers provide for showing the number of shares of stock transferred to and from each stockholder, and usually a column for the "balance." No money columns are necessary, because the corporation is not concerned with the amount paid or received by stockholders in their stock transactions one with another. The only time the corporation is interested is when stockholders do not pay the full price of subscriptions to an original issue of stock, in which event accounts are kept with subscribers in a subsidiary ledger, called Subscribers' ledger or Installment ledger, or possibly the accounts may be carried in the general ledger itself.

The stockholder's ledger account, however, is similar to an ordinary ledger account in respect to being debited with certain transactions and credited with others. Some bookkeepers debit a stockholder when a certificate of stock is issued to him; others credit him. The former would credit the stockholder for cancellations of certificates, the latter would debit him. It is immaterial which point of view is adopted, as long as the method of debiting and crediting is consistently followed. Postings to the stock ledger are made from the Transfer Book, the Register of Transfers, or from the stubs of the stock certificate book, as the case might be.

Assuming that the records are correctly kept, the stockholder's ledger account is legal evidence of the ownership of stock. For instance, an owner of a certificate may lose it, and still receive dividends and be entitled to vote at stockholders' meetings, provided he was a "stockholder of record." Being a "stockholder of record" means having a ledger account recording the ownership of stock. The stock certificate is also evidence of ownership, but of course, the certificate might be forged, and in that case the stockholder of record and not the person whose name appeared on the certificate would be recognized by the corporation.

Lists for the purpose of making out dividend checks and notices of annual meetings of stockholders are prepared from the stockholders' ledger. Thus it may be plainly seen why the

transfer books are "closed" a number of days prior to meetings and dividend dates, otherwise the lists would hardly be started before it would be necessary to revise them.

17. Subscription Lists

In order to assure the raising of a sufficient amount of capital to start a corporation, incorporators will sometimes secure "subscriptions" to the capital stock. These are nothing more than pledges to take the stock when issued, after the incorporation has been completed. Sometimes subscription lists are circulated, and in certain respects resemble petitions to congress or other legislative bodies. At the top of the list may be printed the name of the proposed company, the amount of its capital stock, and the general terms of the subscription, such as whether subscriptions are to be paid in full or on the installment plan. Then follows space for the subscribers to sign their names, to write their addresses and to indicate the number of shares which each agrees to take.

18. Installment Receipts and Stock Scrip

When a subscription is on the installment plan, installment receipts may be made out for each payment. Then when the subscription is fully paid, the installment receipts are surrendered and exchanged for a stock certificate. On the other hand, Stock Scrip may be issued as an acknowledgment of the payment of the first installment. There is no difference in principle here, except that the Stock Scrip is a special form, transferable in a similar manner as a stock certificate. On the back of the scrip, provision is made for further payments on account of the subscription, and when the last payment has been made, the scrip is exchangeable for a stock certificate. Stock Scrip is also sometimes issued for fractional shares of stock, especially in connection with "stock dividends," which term will be explained later.

19. Installment Book

Installments on account of stock subscriptions may be payable

on fixed dates or upon request of the Board of Directors. When an installment is due a list of persons from whom payments may be expected is prepared showing amount due and amount paid, and date of payment. Such lists, one for each installment, constitute the installment book.

QUESTIONS

LESSON 31

1. Why is it especially desirable to organize a large business under the corporate form?

2. In what respects is it safer to buy stock in a corporation than to buy an interest in a partnership, other things being equal? Explain fully.

3. State in a general way how a business is incorporated and organized ready to start.

4. How does the way in which corporations are managed differ from the way in which sole proprietorships and partnerships are managed?

5. Explain the principal ways in which a corporation differs from a partnership as to ownership.

6. What are shares of stock?

7. What are stock certificates used for?

8. Explain how the distribution of the profits of a partnership differs from the distribution of the profits of a corporation.

9. Define corporation.

10. Under what three general bodies of law are corporations conducted?

11. Name four books or records which are kept by the corporation in connection with the issue of shares of stock. Explain briefly the functions of each book or record.

12. What is a minute book? Explain why it is important that an auditor should consult the minute book.

13. Explain the meaning of the expression, "the original issue of stock."

14. Explain briefly Subscription Lists, Installment Receipts, Installment Book, and Stock Scrip.

LESSON 32

CORPORATIONS
STOCKS AND DIVIDENDS

1. Introductory

While the stock certificate represents ownership in a corporation, it does not necessarily follow that all stockholders are on the same footing. It might be presumed that a stockholder owning ten shares of stock would have the same rights and privileges as another stockholder owning the same number of shares; or one-half the rights of a third stockholder owning twenty shares. This may or may not be true, depending upon whether the shares represented "preferred" stock or "common" stock, that is, whether they represented the same kind of stocks, or different kinds. Common stock and preferred stock may both be of the same par value and yet in some cases the preferred stock will be worth more in the open market than the common, and in certain other cases the opposite will be true. The reason for this will be apparent when the distinctions between preferred and common stock are understood.

2. Classifications of Stock

Stock issues may be broadly divided into common stock and preferred stock. Preferred stock may be sub-divided into cumulative preferred and non-cumulative preferred.

3. Preferred and Common Stock—Advantages and Disadvantages

Preferred stock is the name given to that class of stock which entitles the owners to some kind of preferential treatment over owners of common stock, which does not enjoy special privileges. This preference may be as to sharing profits, or as to sharing in the distribution of assets of a corporation upon dissolution, or both.

If the stock is preferred as to sharing in the profits, the holders may be entitled to a dividend, even though the profits may not have been large enough to warrant paying dividends also to holders of common stock. This must not be construed to mean, that a dividend *must be* paid to preferred stockholders. The question as to whether a dividend shall be paid or not is decided solely by the Board of Directors, as has been stated before. The corporation is not required to pay a dividend on preferred or any other class of stock, unless a dividend has been declared by the Board of Directors. Preference as to profits does mean, however, that the board may declare a dividend in favor of preferred stockholders and omit to declare a dividend on the common stock, if it so chooses, and conditions warrant the payment of the preferred dividend. In other words, it sometimes happens that there may be enough profits or surplus accumulations to pay a dividend to the preferred stockholders at an agreed rate (mentioned in their certificates) but not enough to pay them and leave a sufficient balance to warrant a further distribution to common stockholders. In this case the preferred stockholders would receive the dividend, if one was declared, and the common stockholders would have to go without. It would appear in cases where there are both preferred and common stock that after the preferential rights have been satisfied and the common stock has participated equally with the preferred, both stocks will share equally the balance of any dividend declared.

For instance, suppose that there was an issue of 7% preferred stock and an issue of common stock. During any one year, the board of directors might declare a 7% dividend on the preferred and likewise 7% on the common. Any further dividends declared during that year, however, would have to be the same on each share whether preferred or common (assuming that the par value of all shares was the same).

A Pennsylvania case was decided practically in accordance with the foregoing statement, but a Maryland court has held that a preferred shareholder is limited to the dividend rate mentioned

in his certificate. Although the question has been differently decided by two different courts, and although a majority of the investing public naturally assume that a preferred stockholder is not entitled to any larger rate of dividend than that mentioned in the preferred certificate, logic seems to be on the side of the Pennsylvania decision.

A preferred stockholder is as much an owner of the business as a common stockholder. The fact that the preferred stockholder enjoys a certain preference over the common stockholder, does not logically mean that the former is not entitled, by reason of his superior position, to enjoy all the rights and privileges of the latter. To avoid all misunderstandings and disputes the preferred stock certificate should clearly set forth the details of the rights of the holder.

All holders of the same class of stock are entitled to receive equal treatment, even though holders of one class of stock may receive more favorable treatment than holders of another class.

The terms and conditions relative to the issue of preferred stock are printed on the certificate itself, so that the purchaser may have full knowledge of them. The terms may be any the incorporators wish to offer, but, of course, the incorporators must consider the interests of the prospective buyers, otherwise the shares will not sell readily.

Following are sample clauses that might appear in any preferred stock certificate:

> "The holders of the preferred stock shall be entitled to cumulative dividends thereon at the rate of 8% per annum for each and every fiscal year of the life of said corporation, payable out of any surplus or net profits quarterly, semi-annually, or annually, as and when declared by the Board of Directors before any dividends shall be declared, set apart, or paid upon the common stock of said corporation.

"In addition to the above 8% dividend, said preferred stock shall be entitled to participate in, and shall share proportionately with the common stock in any other dividends which may be declared or paid by said corporation.

"In event of any liquidation, dissolution, or winding up, whether voluntary or involuntary, of the corporation, the holders of the preferred stock shall be entitled to be paid in full both the par amount of their shares and the accrued dividends thereon, before any amount shall be paid or any assets distributed among the holders of the common stock, and after the payment to the holders of the preferred stock of its par value and the unpaid accrued dividends thereon, the remaining assets and funds of the corporation shall be divided among and paid to the holders of the common stock according to their respective shares.

"The whole or any part of the preferred stock may be redeemed at any time after January 1, 1940, at the option of the Board of Directors by paying for each share of the preferred stock so redeemed, the sum of one hundred and fifteen dollars in cash, and any accrued and unpaid dividends thereon, or, at the option of the holder of the preferred stock, so called for redemption, by exchanging the same for common stock at the rate of two shares of preferred for one share of common."

The total amount of preferred stock authorized and the number of shares and par value of each, should be provided for in the certificate of incorporation, although a reclassification of the stock can be adopted subsequently by filing a certificate as prescribed by law.

A holder of preferred stock, as has been intimated before, is not necessarily deprived of the rights of a common stockholder by virtue of his preferred claims. In fact, he usually enjoys all the rights of the latter as to voting at stockholders' meetings, and as

to receiving dividends, unless that right is specifically denied in the certificate. The voting privilege entitles any stockholder to cast as many votes as he holds shares of the kind, or kinds, of stocks entitled to vote.

When stock is preferred as to dividends, the preferred stock calls for a certain rate of preferred dividend, say 6% or 7% or 8%. This means that preferred stockholders are entitled to receive dividends up to and including that rate during any one year (and to back dividends in case of unpaid dividends accumulated on cumulative preferred stock) before any dividend can be declared in favor of the common stockholders. This is to the advantage of the preferred stockholder when the profits of the company are small, but when the profits are large, it may be a decided disadvantage, if he is limited by the terms of the issue to a maximum of 6% or 7% or 8%, as the case might be. On the other hand the common stockholder is not limited as to the amount of dividend he may receive. Consequently, if profits are large and the board of directors decides to "cut a melon" in the way of declaring an unusually large dividend or an "extra" dividend, the common stockholder will have an advantage over the preferred stockholder, if the latter's rights to dividends are restricted. This difference between preferred and common stock usually accounts for the difference in price between the two as quoted on the stock exchange. When there is doubt about a company's being able to pay dividends on the common in excess of the rate enjoyed by the preferred stockholders, the preferred stock will sell for more than the common. If, on the other hand, the directors have been in the habit of paying considerably larger dividends to common stockholders than to the preferred, the common stock will almost invariably command a higher price than the preferred.

However, as stated before, almost any terms may be offered to the preferred stockholder or any restrictions may be imposed. For example, preferred stock may be denied the right to vote. Referring to the sample clauses that might appear in a certificate

of preferred stock mentioned on pages 3 and 4, it will be noticed that provision is made that "in addition to the above 8% dividend said preferred stock shall be entitled to participate in and shall share proportionately with the common stock in any other dividends which may be declared or paid by said corporation." This gives the preferred stockholder a decided advantage over the common stockholder, but this is offset somewhat by the final clause which says that the preferred certificate can be redeemed by the company after January 1, 1940, or at the option of the holder, it may be exchanged for common stock at the ratio of two shares of preferred for one share of common.

There may be several kinds of preferred stock issued by the same company, varying as to rates of preferred dividends, or as to the order in which dividends may be payable, or the order in which assets may be distributed, and the like. These issues may be referred to as first preferred, second preferred, and so on.

When a company issues only one class of stock it is common stock.

4. Cumulative and Non-Cumulative Preferred Stock

Cumulative preferred stock is stock on which the preferred dividend cumulates, if not declared at any regular dividend date. For example, if the cumulative preferred rate were 6% and no dividends were paid in 1920, the preferred stockholder would be entitled to receive 12% in 1921 before any dividend could be paid to the common stockholder. If, however, only 8% of that 12% were paid in 1921, the difference, 4%, would cumulate or carry over into 1922, when the preferred stockholder would be entitled to receive 10% before any dividends could be paid to the common stockholder.

If, on the other hand, the dividend is preferred but non-cumulative, a dividend not declared at any given dividend date is not usually subsequently recoverable, even though the board of directors might, as far as profits were concerned, have been justified in

declaring the dividend. A preferred dividend is held in law to be "cumulative" unless it has been otherwise provided. Non-cumulative preferred stock, especially if it has no voting power (which it may not have), is ordinarily not considered to be a good investment, for the reason that holders of such stock might be absolutely powerless to prevent a board of directors from passing a dividend in any one year, (to which the preferred shareholders were really entitled), and paying the money out in a subsequent year to common stockholders.

Of course, in the subsequent year, the preferred stockholders would have to be paid their regular yearly dividends ahead of the common stockholders. But the point is that the preferred stockholders would thus receive only one year's dividends instead of two.

It is usual for the board of directors to consider the dividend at certain regular meetings, usually held quarterly, semi-annually or annually. Failure to declare a dividend is referred to as "passing the dividend."

5. Redemption and Conversion of Preferred Stock

When one of the conditions under which preferred stock is issued provides that it may be bought back by the company, usually after a given date and at a stated price, the stock is said to be redeemable. Referring again to the sample clauses of a preferred stock certificate mentioned on pages 3 and 4, notice the redemption feature as follows: "The whole or any part of the preferred stock may be redeemed at any time after January 1, 1940, at the option of the Board of Directors by paying for each share of the preferred stock, so redeemed, the sum of one hundred and fifteen dollars in cash and any accrued and unpaid dividends thereon."

In this particular instance the redemption clause was undoubtedly included to offset to a certain extent the "participation" clause which allowed the preferred stockholder to share in divi-

dends proportionately with the common stockholder, after the payment of the 8% preferred dividend.

Suppose, for example, that the earnings of this company were so large that it could afford to pay exceptional dividends. If the preferred stockholders were "bought out" and thus eliminated from a share in the profits, the common stockholders could receive more on their shares. Therefore, under such circumstances it would be to the advantage of the common stockholders (who would no doubt control the company) to vote for a redemption of the preferred stock which, however, could not take effect until after January 1, 1940. But it would be unfair to ask the preferred stockholders to risk their capital in the enterprise only to be deprived of the enjoyment of large returns as soon as large profits were earned. Therefore, further provision is made to return to a preferred stockholder fifteen dollars a share more than he paid, or to allow him to take advantage of the "conversion" privilege which permits him to exchange two shares of preferred stock for one of common, if he did not care to have the preferred stock redeemed. This exchange of one kind of stock for another is called "conversion."

It will be noticed that the redemption and conversion features of the stock we have mentioned are not operative until 1940. This was to make the preferred stock issue still more attractive. If a number of years must expire before the preferred stockholder loses his right to share the profits with the common stockholder on the basis of the number of shares originally purchased, he is more likely to invest in the preferred stock than if this privilege were short lived.

6. Guaranteed Stock

Guaranteed stock is not a particular kind of stock like common stock or preferred stock, but stock which enjoys a guarantee, usually of another corporation. For example, if company A says to the stockholders of company B, "we will guarantee you against loss of your investment in the stock of company B, and will further

guarantee to pay you dividends on your stock," (specifying the rate if it is common stock), company B's stock would be "guaranteed" stock, regardless of how it might otherwise be classified.

Sometimes preferred stock is spoken of as guaranteed stock, because of the preferential features, but this is not the real meaning of the term. No company can guarantee its own dividends or the repayment to stockholders of their investments in the business. For that matter, one corporation cannot absolutely guarantee the stock of another. The guarantee can be no stronger than the guarantor. But when stock is "guaranteed" the investment is ordinarily more secure than when it is not guaranteed, because the assets of two companies, instead of one, are behind it then.

7. Consideration for the Issue of Stock

In a partnership, it will be remembered, a partner can contribute assets other than cash or can even contribute skill as his share of the firm's capital, in which event his capital account would be credited with the value put upon those assets or that skill, by the agreement of all partners. It is similar with a corporation. One or more of the subscribers to the capital stock, instead of paying cash, may transfer to the new company certain property. In other cases the company may issue stock to certain persons for services rendered.

Whatever the details of the transactions may be, the law holds in general that the corporation must not issue stock except for "value received," that is to say for cash, property, or services equal to the par value of the stock given in exchange therefor.

Cash, of course, can be easily valued, but it is not so easy to appraise property or services. The right to decide how much the property or services are worth to the corporation rests with the board of directors whose word in this matter is final, unless evidence of fraud can be shown.

Section fifty-five of the Corporation Laws of the State of New York reads as follows:

> "No corporation shall issue either stocks or bonds except for money, labor done, or property actually received for the use and lawful purposes of such corporation. Any corporation may purchase any property authorized by its certificate of incorporation, or necessary for the use and lawful purposes of such corporation, and may issue stock to the amount of the value thereof in payment therefor, and the stock so issued shall be full paid stock and not liable to any further call, neither shall the holder thereof be liable for any further payment under any of the provisions of this chapter; and in the absence of fraud in the transaction the judgment of the directors as to the value of the property purchased shall be conclusive; and in all statements and reports of the corporation, by law required to be published or filed, this stock shall not be stated or reported as being issued for cash paid to the corporation, but shall be reported as issued for property purchased."

8. Partly Paid Shares

The fact that stock must be issued for value equal to par, does not mean that a certificate must be fully paid before it can be issued. For example, the par value may be $100, and only $50 may be paid into the corporation. In this case a certificate may be issued "50% paid," but the holder of that certificate would be responsible for the balance due if called upon by the corporation at any time to pay it or he would be responsible for its payment immediately upon the dissolution of the corporation, if the amount due were needed to pay creditors.

An exception to this rule is that when a person innocently purchases a partly paid share, believing the representation of the

corporation that it was fully paid, he is not responsible for the balance due.

As a matter of fact, however, we believe you will not meet many problems, if any, involving partly paid stock, because as a general rule stock is issued "fully paid," and when it is not, the balance is usually soon "called." We venture to say that almost any stock certificate you may pick up will read "fully paid and non-assessable."

9. Shares of No Par Value

Under the laws of certain states, including New York, corporations may, if they so desire, issue stock without par value. This eliminates all questions as to whether or not the stock was sold above or below par. The original value of each share sold under this plan can be determined simply by dividing the number of shares issued into the total value received therefor.

10. Increase or Decrease of Capital Stock

The capital stock of a corporation may be increased or decreased by due process of law, involving the consent of stockholders. When the amount of capital stock is decreased, the consent of the state authorities as well as of the stockholders, is usually required. Courts in some states, however, have decided that a corporation may buy or sell its own stock, if there is no statute to the contrary and the purchase or sale is not undertaken in bad faith, nor with the intent of defrauding creditors. The purchase by a corporation of its own stock, of course, reduces the amount "outstanding" in the hands of the public and weakens to that extent its financial strength. Some states forbid such purchases.

11. Watered Stock

The expression "watered stock" was formerly heard rather frequently in connection with the organization of new companies,

but of late it appears to be used less often. Perhaps stricter supervision over the capitalization of new corporations, which seems to be the order of the day, will eventually make this expression obsolete.

Watered stock is only another way of saying "over-capitalization." It means the issue of stock, the par value of which is far in excess of the real value of the property or services received in exchange.

As mentioned in a previous section, stock is supposed to be issued for equal value in cash, property or services. It was further stated that the directors are the judges as to the value to the corporation of the property acquired or the services rendered. If the directors were interested in paying a high price for the property or the services, they could, of course, decide upon inflated valuation, and still it would be difficult to *prove* that their motives were not entirely what they should have been, even though apparently they were not. This is especially true if a corporation purchases "good-will," good-will being at best an elusive thing to value. Therefore it would, in most cases, be impossible to prove in court that a board of directors had been dishonest in paying the price they did for good-will. A similar situation arises when stock is issued for services. It is hard, especially for an outsider, to say whether or not the services were worth to the corporation the equivalent of the stock issued therefor, unless evidence of fraud or of undue partiality were quite apparent.

There might be several motives behind watering stock. The persons who sold the assets to the corporation might be "friends" of the directors, or the stockholders might be interested in an over-capitalization in order to make the profits appear to be a less percentage of the capital investment than they really were.

12. Cumulative Voting

As a rule, each stockholder is allowed to cast one vote for each director in a meeting to elect directors, or one vote on each

question arising in any stockholders' meeting for every share of stock which he holds. Voting privileges may, however, be restricted to certain classes of stock, or may be made "cumulative."

When each stockholder may cast for each director only one vote for every share of stock he holds, it is obvious that the majority of the stockholders can, if they so desire, elect all the directors, if directors are elected by majority vote, and thus completely dominate the board at all times. Abuse of this power led to the system of cumulative voting under which each stockholder is entitled to as many votes as he has shares, multiplied by the number of directors to be elected. Thus if stockholder A held 100 shares, and seven directors were to be elected, he would be entitled to 700 votes, which he could cast as he saw fit. He could vote all 700 for any one director or he could "split" his vote, 350 to one and 350 to another or in any other way he wished.

By the system of cumulative voting minority stockholders, by combining, can usually elect one or more directors, and thus have some representation and influence on the board.

13. Treasury Stock

Unissued Stock is sometimes referred to as Treasury Stock, but this is not a correct use of the term. Although unissued stock has a potential value in that it may be the means of raising additional funds when they are needed, it has no actual value until it is issued. Treasury Stock, in the real sense of the word, means the capital stock of a corporation which comes back into the treasury either through purchase or gift, after it has once been issued as fully paid.

If the entire capital stock of a corporation should be issued for the purchase of property, as is sometimes done, the business finds itself without working capital with which to start operations. In such cases, it is usual for the shareholders to donate back to the corporation some of the stock which they received for the property.

Such stock, which then becomes known as Treasury Stock, can be legally sold for any price it will bring, whereas stock of original issue must ordinarily be sold for at least par. Thus capital may possibly be raised through the sale of Treasury Stock at a figure less than par when there is no market for the stock of original issue at its par value.

Not all states permit a corporation to purchase its own stock, because of the opportunity such practice affords a corporation to defraud creditors by returning to certain shareholders the amounts of their investments before an impending condition of insolvency occurs. But when a state does permit a corporation to purchase its own capital stock, purchased stock is considered Treasury Stock just as much as if it had been donated to the company.

Treasury Stock is not entitled to vote at any meetings of stockholders, nor to receive any dividends, so long as it is held by the company.

14. Stock Dividends

Stock dividends are dividends paid in stock of the company declaring the dividend, instead of in cash. The payment of a stock dividend, it may seem strange to say, leaves the stockholder's equity in the corporation exactly where it was before the dividend was declared. Suppose for example, that the net assets of the corporation were $150,000, represented by capital stock of $100,000 and surplus of $50,000, and that the capital stock was divided into 1,000 shares of a par value of $100 each. The book value of each share would be $150, of which $100 would represent the original capital and $50 the increase in value due to an accumulated surplus. Now suppose that the corporation paid a 50% stock dividend, the net assets would still be the same as before, namely, $150,000, but they would be offset by capital stock of $150,000 instead of by capital stock of $100,000 and surplus of $50,000, and each stockholder would have a ratio of

1½ shares of stock with a book value of $150, instead of 1 share with a book value of $150. The number of shares of stock would increase but not the net worth of the business, therefore each stockholder would possess more shares of stock, but the value of each would be less. If, on the other hand, a cash dividend of $50,000 had been paid, the net worth of the business would have been decreased by that amount. Each stockholder would find himself possessed of the same number of shares of stock as before, but the book value of each would shrink from $150 to $100. On the other hand, he would have $50 in cash to offset the diminished value of the stock. Often the market value of stock on the stock exchange is "run up" on rumors of an impending "stock dividend," in spite of the fact that such a dividend does not increase the intrinsic value of the stockholder's investment. If, however, the corporation continues to pay the same rate of cash dividend on an increased number of shares resulting from the stock dividend, each stockholder would, of course, receive a larger dividend, which would amount to the same thing as if the corporation had declared a larger rate of cash dividend instead of a stock dividend.

When the market price of stock advances on rumors of a stock dividend, it is usually in expectation of larger ultimate cash dividends. Stock dividends make it possible for corporations to pay larger cash dividends to stockholders without apparently increasing the rate.

QUESTIONS

LESSON 32

1. Assume that a corporation was organized on January 2, 1919, and issued the total amount of its authorized capital stock as follows:

7% Cumulative preferred	$ 600,000
5% Non-cumulative preferred	800,000
Common	1,000,000

The preferred stock was restricted to the dividend rates mentioned in the certificates. The corporation barely earned its expenses during 1919 and 1920, but made a fairly large profit in 1921. At the end of 1921 the board of directors found that they were warranted in distributing profits amounting to $146,000. What amount of dividends should be paid to each class of stockholders?

2. Suppose that in Question 1 the profits available for distribution had been $276,000 instead of $146,000 and that neither class of preferred stock was restricted to the rate of dividend mentioned in the stock certificates. What rate of dividend should the directors declare on each class of stock? Show how you arrived at your results.

3. Suppose that in Question 2 the profits available for distribution had been $196,000 instead of $276,000, what rate of dividend should the directors declare on each class of stock? Show how you arrived at your figures.

4. Into what two general classifications may the stock of a corporation be divided?

5. In the text it is stated that a Maryland court had decided that preferred stockholders are not entitled to a larger rate of divi-

dend than that mentioned in the preferred certificate, but that a Pennsylvania court had decided that they may receive more, provided the amount of dividend declared is greater than the amount necessary to pay the preferred stockholders their dividends at the rate mentioned in the stock certificate and to pay the common stockholders dividends upon their stock at the same rate. State which you think is the more logical decision and give reasons for your opinion.

6. State two conditions, both of which must be fulfilled before a person would be entitled to receive a preferred dividend.

7. In what two respects may preferred stock be preferred? Explain fully.

8. If a corporation's charter authorized an issue of capital stock of $500,000 divided into 2,500 shares of preferred and 2,500 shares of common stock of the par value of $100 each, and 1,000 shares of each had been issued, could the corporation issue 3,500 additional shares of common? If not, how many additional shares of common could it issue? Explain your answer fully.

9. What is meant by the redemption and conversion privileges sometimes attached to preferred stock? When would redemption privileges attached to preferred stock be advantageous to common stockholders and under what circumstances would they be disadvantageous to common stockholders?

10. Is guaranteed stock preferred stock? Give reasons for your answer.

LESSON 33

CORPORATIONS
BONDS AND INTEREST

1. Introductory

While a corporation is principally distinguished from the sole proprietorship and the partnership by the issuance of stock to represent the ownership of the business, by the ready transferability of that stock, by the limited liability of the owners, and by the method of managing and controlling the business, there is another feature that usually distinguishes a corporation from the other two forms of organization, although this second feature does not necessarily pertain exclusively to a corporation. We refer to the method adopted by corporations of borrowing by means of issuing bonds.

Usually a sole proprietorship or a partnership conducts its business on a comparatively small scale. Consequently it does not need a relatively large amount of capital. The amount of capital contributed by the proprietor or by the partners, together with a certain amount of credit allowed by merchandise creditors, is generally all that is required. If, by chance, the business is required to raise additional funds, such funds are usually obtained by borrowing from one or two individuals in the immediate vicinity, and placing a simple mortgage on the property to secure the bond or promissory note given.

A corporation, however, may be organized to do country-wide, if not world-wide, business. To finance itself properly, it may need a great deal more capital than it is authorized to raise, or could raise, through the sale of capital stock. In that event, it may resort to an issue of bonds. In other cases a corporation, after it has been organized and running for some time, may decide to expand activities and may find that the quickest and best way to secure the necessary working capital for that purpose is likewise through the sale of bonds.

The bonds which are usually issued by a corporation do not differ in fundamental principles from the ordinary bond of an individual who mortgages his home. When a man borrows money by "putting a mortgage on his property," he merely signs a bond (which is nothing more than a formal promissory note) agreeing that he will repay the money with interest when due. At the same time he signs another instrument called a "mortgage," by which he assigns to the person who loaned him the money, all rights and title to the property on condition that the assignment shall become void upon repayment of the loan. If the borrower is unable to pay back the amount borrowed or any installment of interest thereon, as he promised in the bond to do, the lender may "foreclose" by due process of law and take possession of the property. In short, the mortgage is merely a form of security for the bond or note. If the property covered by the mortgage does not, when sold, realize enough to satisfy the loan, it simply means that the security was insufficient, in which event the mortgagee still has a claim upon the mortgagor for the balance of the bond.

When a corporation attempts to borrow a large amount of money, it usually has to obtain this money, in effect, by borrowing comparatively small sums from a great many persons. In actual practice the corporation "issues" bonds and "sells" them either directly or indirectly (through bankers) to the public. The corporation does not really sell the bond, however, in the sense that it might sell merchandise. It merely borrows money from the person who "buys" the bond.

These bonds, if they are "mortgage" bonds, are secured by a pledge of property of the corporation in the same way as the bond given by the individual mentioned above is secured by a pledge of his home. There is this distinction, however. In the case of the individual borrowing, there are usually only one piece of property and one bondholder. In the case of the corporation borrowing, there are, more often than not, a great many bondholders whose

loans are secured by the same piece (or pieces) of property. Therefore it is usual for a corporation to create a deed of trust and to appoint a trustee for the pledged property to protect the interest of all bondholders.

2. Definition and General Description of Bonds

A bond has already been defined as a document signed under seal in which a promise is made by the one who signs the bond to pay a definite amount (or amounts) of money at a specified date (or dates). A corporation bond usually is an elaborate affair setting forth full particulars of the loan. These particulars would include the amount and maturity date of the bond, the rate of interest, dates on which interest was payable, detail as to how and when bonds might be redeemed before maturity, a reference to any trust agreement that might exist, and similar matters.

Corporation bonds are issued in definite "denominations," that is to say with specified par values, such as for example, $1,000, $500, or $100. Bonds of the smaller denominations are sometimes referred to as "baby bonds."

Following is an illustration of the wording that might be found in a corporation bond:

> "The Blank Company, a corporation of the State of New Jersey (hereinafter called the Company), for value received, promises to pay to the bearer, or, if registered, to the registered holder hereof, on May 1, 1931, at the office or agency of the Company in the Borough of Manhattan, in the City and State of New York ....Five Hundred Dollars..........in gold coin of the United States of America, of or equal to the standard of weight and fineness existing May 1, 1921, and to pay interest thereon from May 1, 1921, at the rate of eight per cent per annum at said office or agency, in like gold coin on August 1, 1921, thereafter semi-annually on

February 1, and August 1, in each year to and including February 1, 1931, and at maturity on presentation and surrender of the coupons hereto annexed as they severally mature. This Debenture is one of a duly authorized issue of Debentures of the Company known as its Ten Year, Eight Per cent, Sinking Fund, Gold Debenture Bonds, limited to an aggregate principal amount of $30,000,000 issued or to be issued under a Trust agreement dated as of May 1, 1921, between the Company and the Blank Trust Company of New York as Trustees (hereinafter called the agreement), to which reference is made for the terms and conditions on and under which said Debentures have been or are to be issued and the rights of the holders thereof. As provided in the agreement, the Company will reimburse to the bearer, or, if registered, to the registered holder hereof, any Pennsylvania personal property tax, not exceeding four mills per annum on each dollar of the principal amount hereof, which may be legally assessed upon this Debenture or upon such bearer or registered holder by reason of his ownership hereof, and paid by him, if application therefor be made as provided in the agreement.

"The Debentures are subject to redemption through the operation of the Sinking Fund provided for in the agreement, and hereinafter mentioned, in whole or in part at any time after May 1, 1922, on thirty days prior notice, given in the manner provided in the agreement at 110% of the principal amount thereof together with accrued interest.

"The Company will on or before March 15, 1922, and on or before March 15 in every year thereafter pay to the Trustee as and for a Sinking Fund to be applied to the purchase or redemption of Debentures, as in the agreement provided, out of the net earnings of the

Company, in the case of the March 15, 1922, payment for the eight months ending December 31, 1921, and in the case of every other payment for the year ending the next preceding December 31, remaining after payment of or provision for all obligations of the Company for all operating expenses, interest, rentals, Sinking Fund under the Mortgage securing the Company's First Mortgage, Twenty Year, Eight Per Cent, Sinking Fund, Gold Bonds, taxes and other fixed charges accrued during said eight months or year, as the case may be, and after payment of full cumulative dividends accrued to the next preceding December 31, on the Company's outstanding prior preference stock, either (1) a sum equal to 25% of such remaining net earnings or (2) in the case of the March 15, 1922, payment the sum of $1,000,000 and in the case of every other payment, the sum of $1,500,000, whichever sum shall be larger; and the obligation to make payment of not less than $1,000,000 on March 1, 1922, and payment of not less than $1,500,000 on every other Sinking Fund payment date shall be cumulative as provided in the agreement. The Company may pay moneys to the Sinking Fund in excess of or in advance of the foregoing requirements and shall be credited on its obligation as aforesaid in subsequent years to the amount of such excess or advance. If payments to the Sinking Fund shall not have effected the retirement prior to maturity of all the Debentures not previously otherwise retired, the Company will on May 1, 1931, pay to the holders of all Debentures then outstanding a premium of 10% of the principal amount thereof. This Debenture shall pass by delivery, unless registered in the owner's name on the books of the Company at the office or agency of the Company in the Borough of Manhattan in the City and State of New York, such registration being

noted hereon. After such registration, no transfer shall be valid unless made at said office or agency by the registered holder, in person, or by attorney duly authorized, and similarly noted hereon; but this Debenture may be discharged from registration by being in like manner transferred to bearer and thereafter transferability by delivery shall be restored; and this Debenture may again from time to time be registered or transferred to bearer as before. Such registration shall not affect the negotiability of the coupons, which shall continue to be transferable by delivery.

"In case an event of default, as defined in the agreement, shall occur, the principal of all the Debentures may become or be declared due and payable in the manner and with the effect provided in the agreement. No recourse shall be had for the payment of this Debenture or the interest thereon against any stockholder, officer or director of the Company either directly or though the Company by virtue of any statute or the enforcement of any assessment or otherwise; such liability of stockholders, directors, or officers as such being released by the holder hereof by the acceptance of this Debenture and being also waived and released by the terms of the agreement.

"This Debenture shall not be valid, or become obligatory until it shall have been authenticated by the certificate hereon endorsed of the Trustee under the Agreement.

"In Witness whereof, The Blank Company has caused this Debenture to be signed by its President or a Vice-President and the Corporate Seal to be hereunto affixed and attested by its Secretary or an assistant secretary and coupons for said interest bearing the facsimile signature of its Treasurer to be hereto attached, all in the

City and State of New York as of the first day of May, 1921.

Attest: THE BLANK COMPANY

Assistant-Secretary: By......................................

Vice-President.

This bond happens to be a second mortgage bond. Although the word debenture occurs rather frequently in the bond, the term is used in its general sense as meaning a debt. It does not mean that this is, strictly speaking, a debenture bond.

3. Classification of Bonds

There are numerous methods of classifying bonds, because after one has exhausted the general classification such as mortgage bonds, debentures, income bonds, and the like, he might go on with a classification based on the purpose for which the bonds were issued, such as bridge bonds, canal bonds, car trust bonds; or with a classification based on the nature of the corporation issuing the bonds, such as municipal bonds, railroad bonds, industrial bonds; or with a classification based on some peculiar feature connected with the bonds themselves, such as convertible bonds or participating bonds; or with a classification based on the life of the bonds, such as short term bonds, or long term bonds. Then there are also underlying bonds, consolidated bonds, collateral bonds, registered bonds, coupon bonds, and so on, almost without end.

4. Mortgage Bonds

Mortgage bond is the name given to a bond secured by a mortgage. The mortgage may be on all or part of the property of the borrower. Mortgage bonds are further divided into first, second, and third mortgage bonds, and so on, according to the order in which they must be paid in case of foreclosure. A corporation, for example, having property worth $100,000 might issue first mortgage bonds against it to the extent of $70,000. Later,

wishing to raise more money, it might issue second mortgage bonds against the same property to the extent of $10,000. In this event the holders of the first mortgage bonds, in case of foreclosure, must be paid $70,000 before the holders of the second mortgage bonds would be entitled to receive anything. If the property realized only $75,000, the holders of the second mortgage bonds would receive only $5,000, but they would, of course, have an unsecured claim for the other $5,000.

Second mortgage bonds usually command a higher rate of interest than first mortgage bonds, owing to the greater financial risks connected with second mortgages.

There are exceptions to the above-mentioned rules, the discussion of which really belongs to the law, but one might be mentioned here. When a receiver takes charge of a corporation and issues "receiver's certificates" these receiver's certificates usually take precedence over all outstanding mortgages.

A second mortgage may be placed on a piece of property at the same time as, or after, a first mortgage, but the second mortgage bonds may be issued to mature before the first mortgage bonds. In such a case the second mortgage bonds would be payable before the first mortgage bonds in point of time, but if the maturity dates were the same for both issues, the first mortgage bonds would have to be paid before payment could be made on the second mortgage bonds.

5. Debenture Bonds

Debenture bonds are bonds issued without specific property having been pledged for their security. In that sense they are merely formal promissory notes, the holders having no preference over other creditors in respect to either principal or interest. The principal must be paid, if at all, from the general, free (unpledged) assets of the corporation. Occasionally corporations find themselves obliged to borrow when loanable funds are scarce, or in the

parlance of financial circles when "money is tight." At such periods the interest rate is high. It is not to the advantage of the corporation under such circumstances to issue long term bonds, as these conditions are usually of a temporary nature. Consequently a corporation will float an issue of short-term debentures if it can, without pledging any of its assets which it wishes to leave free to mortgage later as security for long-term bonds, if necessary. A corporation that is financially strong can generally sell debentures upon advantageous terms.

6. Income Bonds

Income bonds are a form of debenture. They are issued, generally by railroads and other public utilities, as a charge against their income. The bonds are not secured by any mortgage, but the interest thereon is payable before any dividends can be paid even to preferred stockholders. Income bonds may be cumulative or non-cumulative in like manner as preferred stock. An example of a non-cumulative income bond is the St. Louis and San Francisco Railway Co. adjustment income, six per cent bond, series A, due 1960, under the terms of which the bondholder is entitled to receive interest "if earned." An example of a cumulative income bond is the Hudson and Manhattan Railroad Co. adjustment income, five per cent bond, due 1957.

7. The Distinction Between Bond Interest and Dividends on Stock

Bondholders are entitled to receive a certain rate of interest on the par value of the bond, the rate being specified in the bond. This interest must be paid unless the corporation is financially embarrassed and cannot pay it, in which case the bondholders can foreclose the mortgage (if interest is "defaulted" on a mortgage bond). In other words, the payment of interest, unlike the payment of a dividend, is not dependent upon a resolution of the board of directors. Interest on bonded indebtedness and dividends

are further distinguished by the fact that interest is an expense of the business, while dividends are distributions of profit. Interest, taxes and similar expenses are spoken of as "fixed charges" because they are not under the control of the board of directors, or officers of the company, that is to say, interest on bonded indebtedness is not under the control of the board of directors after bonds have been issued; and the amount of taxes levied against a business, of course, rests entirely with the civil authorities.

8. Convertible Bonds

Bonds may be issued with convertible features similar to those described in connection with preferred stock. When this is the case, it is agreed in the bond that it may be exchanged any time during the life of the bond for, possibly, preferred or common stock at a certain fixed price. Such a clause may prove very valuable to the bondholder if the market price of the stock into which it is convertible, rises above the price at which it is convertible or the bondholder may wish to make the conversion and not to "sell out at a profit," because he believes he will receive more in dividends from the stock than he would receive in interest on the bond.

Convertible bonds are usually issued to attract investors of a speculative turn of mind.

9. Serial Bonds

Bonds are called "Serial Bonds" when part of the entire issue matures each year, beginning either during the first year or at the end of a fixed number of years. In effect, the corporation obligates itself to make annual payments "on account." For example, the bond issue may cover a period of fifteen years with one-fifteenth of the total falling due each year.

Serial bonds may be either mortgage or debenture bonds. If they are the former, the property pledged under the mortgage must

remain "tied up" until the last installment is paid, unless provision has been made calling for a release of portions of the property from the mortgage obligation as each successive "series" of bonds is redeemed.

10. Redemption of Bonds

A bondholder may not enforce payment of the bond until maturity. However, bonds often contain clauses which permit the company to "call" or buy back part or all of the bonds before they are due, if it so desires. The usual provision is that the bonds will be redeemed at a certain price above par value. In these cases it is customary for the company to select the particular bonds to be redeemed by drawing lots. As all bonds are numbered, it is easy for the company to adopt this method of selection without being accused of partiality.

The redemption clause is inserted, of course, to make it possible for the corporation to save some of its interest expense by cutting down its bonded indebtedness from time to time, without being obliged to wait until maturity.

11. Sinking Fund Bonds

In certain cases bonds are issued under an agreement obligating the corporation to pay to a Sinking Fund Trustee a certain amount of money periodically (usually annually) to apply toward the reduction of the bonded indebtedness. These are called Sinking Fund Bonds. The workings of the sinking fund and the book entries in connection therewith, will be explained later.

12. Collateral Trust Bonds

Collateral Trust Bonds are so called on account of the nature of the security behind them. Collateral Trust bonds are secured, not by a pledge of land and buildings or similar fixed assets, but by the hypothecation of stocks and bonds of another corporation. For example, company A, owning stocks and bonds of company B,

may wish to raise some money. Not having any fixed assets, such as real estate free for mortgaging, company A may agree to deposit with a trustee all the stocks and bonds of company B that it owns, as security for the payment of the bonds which it wishes to issue. The bonds issued by company A would, in that event, be known as Collateral Trust bonds, because the security therefor was represented by a deposit of collateral (stocks and bonds).

The value of the security back of an issue of Collateral Trust bonds depends naturally upon the worth of the stocks and bonds pledged. If part of the collateral consists of first mortgage bonds, the security may be as safe as a mortgage itself on the property of the issuing company.

13. Gold Bonds

The term Gold Bonds merely indicates that the bonds are payable in gold. While gold is the standard of currency in the United States, there are said to be bonds still in existence in this country payable in silver.

14. Purchase Money Mortgage Bonds

Purchase Money Mortgage bonds do not differ materially from any other kind of mortgage bonds. They have been given this name principally in order that it may be known that the money raised by the issue of such bonds was used to purchase property, and that the property thus purchased was mortgaged as security for the bonds. A corporation may have acquired its property originally through an issue of stock or by payment in cash. If later it decides to mortgage the property as security for an issue of bonds, such bonds would be plain "Mortgage" bonds and not "Purchase Money Mortgage" bonds.

15. Guaranteed Bonds

Guaranteed bonds are based on the same principle as guaranteed stock, mentioned in the preceding lesson. They are merely

bonds of one corporation, the payment of which is "guaranteed" by another corporation, in case of default by the issuing company. The guarantee usually covers both principal and interest.

16. Refunding Bonds

Bonds when they become due may be "refunded." That is to say, a new bond issue may be floated to raise the money with which to retire the old bonds. This is in effect extending the original loan.

The Great Northern Railway Company's funded debt includes an issue of First and Refunding Mortgage A bonds, 4¼%, due July 1, 1961. The total amount authorized was $600,000,000, but not all were issued, some being held to refund other issues of bonds as they matured.

17. Authority for Bond Issues

The board of directors cannot mortgage the property of the corporation without the consent of the stockholders, which consent must be obtained in accordance with the provision of the by-laws. For example, the by-laws may require a majority vote, or possibly a two-thirds vote. As a rule, the stockholders in authorizing an issue of mortgage bonds, limit the board of directors to a certain maximum amount. The board may proceed to have mortgage bonds issued for less than the amount authorized, but they cannot legally exceed that amount.

Furthermore, many states limit the amount of bonds which the stockholders may authorize. Mortgage bonds would naturally be limited anyway to a certain percentage of the value of assets pledged as security for the loan. For that matter, any bond issue would be limited more or less by the credit standing of the issuing company. A company in poor standing could sell but few bonds, if any, regardless of the amount which the stockholders had "authorized."

18. Authorized Bonds

This is a term employed to designate the total amount of bonds authorized by stockholders. It corresponds with the term "authorized capital" used to indicate the total amount of capital stock which a corporation is allowed by its charter to issue.

19. Outstanding Bonds

This is a term used to designate the total amount of bonds actually issued by a company and in the hands of the general public. Bonds may have been issued and certified by a trustee and be ready for sale, but such bonds are only "nominally outstanding," until actually sold.

20. Unissued Bonds

These are bonds that have been authorized but have not yet been issued.

21. Certification of Bonds

Bonds are usually "certified" by a trustee before they are sold. The trustee records the authorized amount of the bond issue and also each bond he certifies, in order that he may not certify bonds in excess of the authorized amount.

If a bond has been certified but still remains unsold, it may be used by the corporation as collateral for a loan. If the loan should not be paid, the bond would probably be sold and the proceeds applied against the loan. The point is that the bond, having been certified, is ready for sale and therefore may be accepted as good collateral, provided the lender considers the security behind the bond adequate.

22. Closed Mortgages

When mortgage bonds have been issued for the total amount authorized, the mortgage is referred to as a "closed mortgage."

23. Coupon Bonds

When the bond certificate has attached to it a series of "coupons" for interest, it is called a coupon bond. These coupons are about two inches by one inch in size and are detachable from the bond certificate. Each coupon is a note in itself, promising to pay a definite amount as interest on the bond, at a definite time. For example, a $1,000 coupon bond dated October 1, 1920, due in ten years and bearing interest at the rate of 5% per annum, payable semi-annually on April 1st and October 1st, would have attached to it twenty coupons. The first coupon would contain the promise of the corporation to pay the holder $25 on April 1, 1921; the second coupon, the promise to pay $25 on October 1, 1921, and so on, the last coupon being payable at the date of maturity of the bond. Thus the holder of the bond receives the interest on his investment by "clipping" the coupons and cashing them as they fall due, usually by depositing them with his bank for collection.

Except in special cases, coupon bonds are transferable from one holder to another by delivery. That is to say, it is not necessary to send coupon bonds to the corporation that issued them to have the transfer recorded. Thus A may receive from B a coupon bond and be recognized as the owner thereof, even though the company has no record of the change in ownership. In fact a corporation does not usually attempt to keep accounts with holders of coupon bonds, as it does with stockholders. The coupon attached to the bond is also transferable by delivery. If a coupon, after having been clipped from a bond, were dropped on the street by the owner and picked up by another person, the latter could "cash" it as if it were his own.

When a coupon is deposited with a bank for credit, the bank sends it to the fiscal agent of the corporation for redemption, the fiscal agent, which is usually a bank or trust company, being supplied by the corporation with funds for this purpose. As soon as the coupon is paid by the fiscal agent, it is cancelled and de-

livered to the corporation as evidence of payment. In this manner coupons, which may be in the hands of hundreds of investors scattered throughout the country, find their way back to the corporation.

The fact that coupon bonds are transferable by mere delivery saves time and trouble when they are bought and sold, but on the other hand, owners are obliged to take extra precautions to safeguard them against loss or theft.

When a bond is sold at any time after an interest payable date, the coupons are left attached to the bond, but the purchaser must pay in addition to the purchase price of the bond, an amount equivalent to the interest accrued thereon from the date of the last coupon clipped, to the date of purchase. Thus the price of a bond is usually quoted at a given figure "and accrued interest," or the extra charge for accrued interest is included in the total price, in which case the bond is said to be sold at a "flat" price.

24. Registered Bonds

Registered bonds are bonds that are registered on the books of the corporation, in a similar manner as stock certificates. A registered bond is not made out to "bearer" as a coupon bond usually is, but to a specified person whom the company recognizes as the owner until the bond certificate is transferred in the regular way. Consequently, registered bonds are not transferable by delivery.

The interest on registered bonds (except in the case of coupon bonds registered as to principal) is paid by checks issued by the corporation to the "bondholders of record" as of a given date, usually a short time before the interest payable date.

In some cases corporations will agree to register coupon bonds "as to principal." This means that the corporation will recognize as the lawful owner of the bond, only the person whose name is recorded on its books as the owner. In this respect this kind of coupon bond is the same as the registered bond. The interest,

however, is payable to the person who cashes the coupon, exactly as if the bond had not been registered.

25. Consolidated Mortgage Bonds

A consolidated mortgage bond is a bond made payable by several corporations which have combined, each individual corporation having previously issued a mortgage against its own property. The security behind the consolidated mortgage lies in the excess value of the combined assets pledged by the several companies over the total of the mortgages previously outstanding.

26. Underlying Bonds

Underlying bonds are bonds having a prior claim over other issues of bonds against the same piece of property. Thus if there were first, second, and third mortgage bonds secured by the same real estate, the first and second mortgage bonds would both be underlying in respect to the third mortgage bonds. In respect to both the second and third mortgage bonds, the first mortgage bonds would be underlying.

27. Conclusion

The funded debt of the Bethlehem Steel Corporation and subsidiary companies furnishes a good example of the variety of bonds that may be outstanding against one large corporation. It includes serial notes, first mortgage bonds, consolidated mortgage bonds, marine equipment certificates, first extension bonds, purchase money, and improvement bonds, first and refunding bonds, collateral trust bonds, and sinking fund bonds.

The capital stock of the Bethlehem Steel Corporation includes the following issues: Preferred, 8%, cumulative, convertible stock, preferred class A, 7%, non-cumulative stock, common stock, and common stock class B.

Sometimes the names of various issues of stocks and bonds are, to say the least, very puzzling to the average investor, who may become still more confused if he attempts to decide the relative advantages of the holders in respect to the security of their holdings.

In view of what has been said about the various features of bonds, it is suggested that you review carefully the provisions of the sample bond set forth in section 2 of this lesson.

QUESTIONS

LESSON 33

1. Define briefly the following: (a) Bond; (b) Mortgage Bond; (c) Debenture Bond; (d) Sinking Fund Bond; (e) Income Bond; (f) Collateral Trust Bond; and (g) Purchase Money Mortgage Bond.

2. Make an outline with headings and sub-headings covering a fairly extensive classification of bonds.

3. Explain briefly the method usually adopted by large corporations to obtain borrowed capital.

4. Distinguish between the terms, "authorized bonds," "unissued bonds," and "outstanding bonds."

5. What is meant by the "denomination" of a bond?

6. Why might a corporation be more anxious to reduce its funded debt than to decrease its capital stock outstanding?

7. Explain the principal differences between a registered bond and a coupon bond.

LESSON 34

CORPORATIONS
OPENING THE BOOKS

1. Introductory

Opening the books of a corporation does not differ materially from opening the books of a partnership or of a sole proprietorship. In fact, the various phases of accounting which you will study are all largely based on the same idea of net worth and debit and credit. That is why the fundamental principles were outlined in the first few lessons of the course. You were asked to master the simple rules of accounting at the start, in order that the more advanced topics might be as easy to understand as the elementary work.

To illustrate how the simple rules of debit and credit and net worth run through the fabric of accounting, regardless of the form of business organization considered, it will be remembered that the books of the sole proprietor were changed from single to double entry by debiting accounts representing the assets of the business at the date of opening the books for the new system, and by crediting accounts representing the liabilities as of the same date, and by crediting the proprietor with the amount representing the excess of the assets over the liabilities, or in other words, with the net worth. The object of the sole proprietor or anyone else in business, is primarily to "make money." In the process of making money, many business transactions have to be recorded, some representing gains, others representing losses, some representing the increase or the reduction of assets, others representing the increase or the reduction of liabilities. Of course, it is always hoped that the net result of all these book entries for an accounting period will show a profit, so that the net worth may be increased. Withdrawals of cash by the proprietor for personal use reduce the net worth, but if

the net withdrawals do not exceed the profits the original investment remains unimpaired.

The same idea prevails in a partnership. The only difference is that the net worth of the business is owned by two or more persons who share the profits or losses among themselves. Each partner's net worth (or capital account) is originally credited with what he contributed. It is increased by additional contributions of capital or by profits realized. It is decreased by losses sustained or by withdrawals of capital.

There is no different principle applicable to a corporation. The only distinction between a corporation and a partnership, from the accounting point of view, lies in the method of keeping accounts representing the net worth of the business.

In opening the books of a corporation, the owners are credited with the original amount of their contribution of capital just as each partner is credited with what he contributed, the main difference in the two cases being that in the case of a corporation each owner has his credit acknowledged in the form of a stock certificate representing his individual interest in the business, whereas in the case of a partnership each partner's interest is represented by a ledger account. In the corporation, however, there is a general ledger account to represent the aggregate interests of *all* owners, and this is called capital stock account. The par value of the shares issued to all owners should equal in the aggregate the credit balance of capital stock account.

It would be impracticable for a corporation of any size to open a general ledger account with each stockholder, because there are usually a great many stockholders and furthermore the ownership of stock is constantly changing. It is necessary, however, to keep accounts with stockholders as to the number of shares held by each, and this is done in a "stock ledger," but it is not necessary, and it would be in many respects only a duplication of work, to keep accounts with stockholders in the general books to show the par

value of the shares held by each. One account representing the par value of the shares held by stockholders in the aggregate is considered sufficient.

2. Opening Entry Should be Preceded by Explanatory Memorandum

The first, or opening, journal entry for a corporation should be preceded by a concise, explanatory statement of the main facts pertaining to the incorporation, the amount and kinds of capital stock authorized, the number and the par value of the shares, the general nature of the business, and other relative matters.

For example, the following explanation would be typical:

FEBRUARY 2, 1922

The Brunswick Machinery Company was this day incorporated under the laws of the State of New York for the purpose of conducting a general business of buying and selling machinery and machine tools of all kinds.

The amount of authorized capital stock was $30,000, divided into 300 shares of the par value of $100 each. Subscriptions were as follows:

	Shares
A	50
B	50
C	20
D	80
E	50
Total	250

3. Three Methods of Opening the Books—The First Method

In the last analysis, there are only two distinctly different

ways of opening the books of a corporation. The first is to open accounts for the stock that has not been subscribed nor issued as well as for the stock that has been authorized; the other is to consider only the stock that has been issued.

We are explaining, however, three possible ways of opening the books. The second method is introduced as an example of what, in our opinion, is an unsatisfactory, if not an altogether wrong, method. Sometimes as much, if not more, can be learned from studying how not to do a thing as from studying how to do it.

The two entries after the explanation illustrated in Section 2, would show the amount of stock subscribed, somewhat as follows, according to what we shall call the first method:

	Dr.	Cr.
Unissued Stock	$30,000.00	
Authorized Capital Stock........		$30,000.00
For total authorized issue of capital stock.		
Subscribers	25,000.00	
Subscribed Capital Stock........		25,000.00
For total amount of subscriptions to capital stock per subscription list as follows:		

A—50	shares....	$ 5,000.00
B—50	"	5,000.00
C—20	"	2,000.00
D—80	"	8,000.00
E—50	"	5,000.00
Total......250	shares	$25,000.00

If these subscriptions were paid in full as soon as the incorporation was completed, the next entry would be one in the cash book crediting Subscribers account. In journal entry form it would be as follows:

Cash	$25,000.00	
Subscribers		$25,000.00
For cash received from subscribers in full for their subscriptions, per subscription list.		

Subscriptions having been paid in full, the next thing the corporation would do would be to issue capital stock to the subscribers. The entry to record this transaction would be as follows:

Subscribed Capital Stock............	$25,000.00	
Unissued Stock		$25,000.00
For stock issued to subscribers per subscription list, upon payment of their subscriptions in full.		

After these four journal entries had been posted, the ledger accounts would appear as follows (dates and reference folios being omitted):

CASH

To Subscribers $25,000.00	

SUBSCRIBERS

To Subscribed Capital Stock $25,000.00	By Cash $25,000.00

UNISSUED STOCK

To Authorized Capital Stock $30,000.00	By Subscribed Capital Stock $25,000.00

AUTHORIZED CAPITAL STOCK

	By Unissued Stock................$30,000.00

SUBSCRIBED CAPITAL STOCK

To Unissued Stock............$25,000.00	By Subscribers $25,000.00

A trial balance of the ledger, if taken at this point, would be as follows:

Cash	$25,000.00	
Unissued Stock	5,000.00	
Authorized Capital Stock............		$30,000.00
Total................	$30,000.00	$30,000.00

This trial balance does not show the amount of stock actually issued, but the amount can be easily enough found by deducting the amount unissued ($5,000.00) from the total authorized ($30,000.00).

Anyone examining this trial balance could tell that all the subscribed stock had been issued, because of the absence of an account called "Subscribed Capital Stock." In other words, the trial balance shows in a negative way that none of the unissued stock, amounting to $5,000.00, had been subscribed.

Referring to the foregoing ledger accounts, it will be noticed that Subscribers account and Subscribed Capital Stock account were both closed almost as soon as they were opened. This will always happen if the amount of stock subscribed before incorporation is fully paid upon incorporation. In such cases the necessity of opening accounts for subscribers and subscribed capital stock might be questioned, but such procedure is followed for the sake of making the records uniform and complete.

We will next assume that under the terms of the agreement, subscriptions were payable 75% upon incorporation and 25% one month later, instead of all at the time of incorporation. We will further assume, for the sake of illustration, that subscriber A paid his subscription for $5,000.00 in full at incorporation and im-

mediately received a certificate for 50 shares. Based on these assumptions, the entries would be as follows:

	Dr.	Cr.
Unissued Stock	$30,000.00	
Authorized Capital Stock........		$30,000.00
For total authorized issue of capital stock.		

	Dr.	Cr.
Subscribers	25,000.00	
Subscribed Capital Stock........		25,000.00
For total amount of subscriptions to capital stock per subscription list as follows:		

A—50 shares....$	5,000.00
B—50 "	5,000.00
C—20 "	2,000.00
D—80 "	8,000.00
E—50 "	5,000.00
Total......250 shares	$25,000.00

	Dr.	Cr.
Cash	20,000.00	
Subscribers		20,000.00
For cash received from subscribers on account of their subscriptions, per subscription list as follows:		

A—(in full)..............$	5,000.00
B—75% of 5,000....	3,750.00
C—75% of 2,000....	1,500.00
D—75% of 8,000....	6,000.00
E—75% of 5,000....	3,750.00
Total............	$20,000.00

Subscribed Capital Stock............	5,000.00	
Unissued Stock......................		5,000.00
For fifty shares of stock issued to A upon payment in full of his subscription.		

After these four journal entries had been posted the ledger accounts would appear as follows (dates and reference folios being omitted):

CASH

To Subscribers $20,000.00	

SUBSCRIBERS

To Subscribed Capital Stock $25,000.00	By Cash $20,000.00

UNISSUED STOCK

To Authorized Capital Stock $30,000.00	By Subscribed Capital Stock ....$ 5,000.00

AUTHORIZED CAPITAL STOCK

	By Unissued Stock.............$30,000.00

SUBSCRIBED CAPITAL STOCK

To Unissued Stock............$ 5,000.00	By Subscribers $25,000.00

A trial balance of the ledger, if taken at this point, would be as follows:

Cash	$20,000.00	
Subscribers	5,000.00	
Unissued Stock	25,000.00	
Authorized Capital Stock............		$30,000.00
Subscribed Capital Stock............		20,000.00
Total................	$50,000.00	$50,000.00

This trial balance does not show the amount of stock actually issued, nor the amount of stock unsubscribed, but both of these amounts can be obtained by deduction. The amount of stock issued can be obtained, as heretofore, by subtracting the amount unissued ($25,000) from the total amount authorized ($30,000). In this case the difference of $5,000 represents the par value of the shares issued to A. Such a deduction may be made on the balance sheet as follows:

Capital Stock:		
Authorized, 300 shares @ $100	$30,000.00	
Less Unissued, 250 shares @ $100	25,000.00	
Outstanding		$5,000.00

The debit balance of Unissued Stock account should never be shown on a balance sheet as an asset.

The amount of stock unsubscribed can be obtained by deducting the balance of "Subscribed Capital Stock" account ($20,000.00) from the balance of "Unissued Stock" account ($25,000.00) In other words, the unissued stock account is composed of two kinds of unissued stock as follows:

Subscribed stock unissued	$20,000.00
Unsubscribed stock unissued	5,000.00
Total	$25,000.00

The difference between the balance of "Subscribed Capital Stock" account ($20,000.00) and the balance of "Subscribers" account ($5,000.00) represents the amount of money paid in by subscribers for which shares of stock have not yet been issued ($15,000).

One month later, let us say, the balance of the subscriptions were paid. The entries then would be as follows:

	Debit	Credit
Cash	$ 5,000.00	
Subscribers		$ 5,000.00
For balance due on subscriptions.		
Subscribed Capital Stock...........	20,000.00	
Unissued Stock		20,000.00
For stock issued to subscribers upon payment in full of their subscriptions.		

4. Three Methods of Opening the Books—The Second Method

As stated before, this method is introduced merely as an example of an unsatisfactory way of opening the books, although the individual journal entries are not impossible ones. We will use the same set of transactions and the same figures to demonstrate the second method as were used to illustrate the first.

The entries in case No. 1, where the total subscriptions were paid in full upon incorporation, would, according to the second method, be as follows:

	Debit	Credit
Subscribed Capital Stock...........	$25,000.00	
Unsubscribed Capital Stock........	5,000.00	
Authorized Capital Stock........		$30,000.00
Cash	25,000.00	
Subscribed Capital Stock........		25,000.00

NOTE—There would be no entry to record the actual issue of the shares of stock to subscribers upon payment in full of their subscriptions.

After these two journal entries had been posted, the ledger accounts would appear as follows (dates and reference folios being omitted):

CASH

To Subscribed Capital Stock $25,000.00	

SUBSCRIBED CAPITAL STOCK

To Authorized Capital Stock $25,000.00	By Cash $25,000.00

UNSUBSCRIBED CAPITAL STOCK

To Authorized Capital Stock ....$ 5,000.00	

AUTHORIZED CAPITAL STOCK

	By Subscribed Capital Stock....$25,000.00 By Unsubscribed Capital Stock.... 5,000.00 ——— $30,000.00

A trial balance of the ledger, if taken at this point, would be as follows:

Cash	$25,000.00	
Unsubscribed Capital Stock....	5,000.00	
Authorized Capital Stock....		$30,000.00
Total....	$30,000.00	$30,000.00

It might be easy to tell from this particular trial balance that the difference between the balance of Unsubscribed Capital Stock account and the balance of Authorized Capital Stock account was the amount of stock actually issued, but if the trial balance showed an account for Subscribed Capital Stock and Cash account had been affected by other receipts and disbursements, the amount of stock issued could not be so readily determined from the general ledger accounts. This fact is more clearly demonstrated in Case No. 2, where subscriptions are partly paid.

The entries in Case No. 2 would be as follows:

Subscribed Capital Stock........	$25,000.00	
Unsubscribed Capital Stock....	5,000.00	
Authorized Capital Stock....		$30,000.00
For total authorized issue of capital stock subscribed as follows (detail omitted).		
Cash	20,000.00	
Subscribed Capital Stock....		20,000.00
For cash received from subscribers (detail omitted).		

NOTE—Fifty shares of stock are issued to A without entry in the journal.

After these two journal entries had been posted, the ledger accounts would appear as follows (dates and reference folios being omitted):

CASH

To Subscribed Capital Stock $20,000.00	

SUBSCRIBED CAPITAL STOCK

To Authorized Capital Stock $25,000.00	By Cash $20,000.00

UNSUBSCRIBED CAPITAL STOCK

To Authorized Capital Stock ....$ 5,000.00	

AUTHORIZED CAPITAL STOCK

	By Subscribed Capital Stock....$25,000.00 By Unsubscribed

Capital Stock....	5,000.00	
		$30,000.00

A trial balance of the ledger, if taken at this point, would be as follows:

Cash	$20,000.00	
Subscribed Capital Stock	5,000.00	
Unsubscribed Capital Stock	5,000.00	
Authorized Capital Stock		$30,000.00
Total	$30,000.00	$30,000.00

We happen to know that $5,000 worth of stock has been issued to one of the subscribers, but how can this fact be readily determined from the aforegoing trial balance? Also how can the liability to stockholders for cash paid in ($15,000) for which stock has not yet been issued, be readily determined?

Notice that under the second method Subscribed Capital Stock account is a debit account, whereas under the first method it is a credit account. The name is properly applicable to a credit account rather than to a debit account. Applied to a debit account the title of Subscribed Capital Stock is a misnomer for Subscribers. Applied to a credit account it designates the amount of accountability for stock subscribed but not yet delivered.

When the second method is used, the trial balance is not so illuminating as when the first method is used. For that reason we recommend the first method in preference to the second.

5. Three Methods of Opening the Books—The Third Method

The third method is practically the same as the first with the accounts for Unissued Capital Stock and Authorized Capital Stock eliminated and an account with issued stock substituted. A further difference may be found in the fact that under the third method

when subscriptions are payable at the time of incorporation, and are so paid, the cash is credited directly to Capital Stock account, as it is not considered necessary to open a Subscribers account and then close it immediately with a cash credit.

We will use the same set of transactions and the same figures to demonstrate the third method as were used to illustrate the first and second methods.

The entries in case one (where subscriptions are paid in full upon incorporation) would, under the third method, be as follows:

Cash	$25,000.00	
Capital Stock		$25,000.00

This is the only entry that would be made, consequently a trial balance, at this point, would show only Cash and Capital Stock accounts, each with a balance of $25,000.00, the one a debit and the other a credit. At this point the question might be raised as to how the amounts of authorized stock and unissued stock can be obtained from such a trial balance in order to show these amounts on the balance sheet. They could not be taken from the trial balance, but they could be easily obtained if the amount of authorized stock were shown as a memorandum on the face of the ledger page for the Capital Stock account. In that event the accountant could easily subtract the balance of the Capital Stock account, which represents the amount of stock actually issued, from the total amount authorized to obtain the amount unissued. It is not necessary to have ledger accounts in order to be able to set forth on the balance sheet the amount of stock authorized, the amount unissued, and the balance outstanding.

If the books are opened according to the first method, the amount of outstanding stock is determined by subtracting the amount of unissued stock from the amount authorized. If the books are opened according to the third method, the process is reversed and the amount unissued is determined by subtracting the amount outstanding from the total amount authorized.

Returning to the matter of opening journal entries to be made under the third method and particularly to case two, where the subscriptions were not all paid at the time of incorporation, the entries would be as follows (detailed explanations in connection with each entry will not be repeated):

Subscribers	$25,000.00	
Subscribed Capital Stock		$25,000.00
Cash	20,000.00	
Subscribers		20,000.00
Subscribed Capital Stock	5,000.00	
Capital Stock		5,000.00

A trial balance of the general ledger, after the posting of these three entries, would be as follows:

Cash	$20,000.00	
Subscribers	5,000.00	
Subscribed Capital Stock		$20,000.00
Capital Stock		5,000.00
Total	$25,000.00	$25,000.00

The Capital Stock account shows only the capital stock actually issued. The third method, in our opinion, is the simplest and most direct and requires the least bookkeeping effort. At the same time it does not sacrifice any of the ends attained by either of the other two methods, because the amount of Subscribed and Unsubscribed Stock, as well as the amount of Unissued Stock, can easily be obtained by deduction. We do not share the view apparently taken by some accountants that ledger accounts must be opened to express every fact. The general ledger should not contain more accounts than are reasonably necessary.

6. Summary of Three Methods of Opening the Books

By way of summarizing and contrasting the three methods

which we have described for opening the books of a corporation, we submit the following:

CASE No. 1

When Entire Amount of Subscriptions is Paid in Full at Time of Organization (Authorized Capital Assumed to be $30,000.00).

First Method	*Second Method*	*Third Method*
Unissued Stock $30,000.00 Authorized Capital Stock $30,000.00	Subscribed Capital Stock ....$25,000.00 Unsubscribed Capital Stock $ 5,000.00 Authorized Capital Stock $30,000.00	
Subscribers........ 25,000.00 Subscribed Capital Stock $25,000.00		
Cash ....$25,000.00 Subscribers $25,000.00	Cash ....$25,000.00 Subscribed Capital Stock $25,000.00	Cash ....$25,000.00 Capital Stock $25,000.00
Subscribed Capital Stock ....$25,000.00 Unissued Stock $25,000.00		

CASE No. 2

When Entire Amount of Subscriptions is Not Paid in Full at Time of Organization (Authorized Capital assumed to be $30,000.00. Subscriptions of $25,000.00 assumed to be paid, 75% at Time of Organization, Except that One Subscriber for $5,000.00 Pays His Subscription in Full).

First Method	*Second Method*	*Third Method*
Unissued Stock $30,000.00 Authorized Capital Stock $30,000.00	Subscribed Capital Stock $25,000.00 Unsubscribed Capital Stock 5,000.00 Authorized Capital Stock.............$30,000.00	
Subscribers ....$25,000.00 Subscribed Capital Stock $25.000.00		Subscribers ....$25,000.00 Subscribed Capital Stock $25,000.00
Cash ....$20,000.00 Subscribers $20.000.00	Cash ....$20,000.00 Subscribed Capital Stock $20,000.00	Cash ....$20,000 Subscribers $20,000.00
Subscribed Capital Stock....$5,000.00 Unissued Stock. $5,000.00		Subscribed Capital Stock $ 5,000.00 Capital Stock..............$5,000.00

7. Separate Accounts for Each Kind of Capital Stock

Separate accounts should be opened for each different kind

of capital stock. For example, if there were three distinct issues of preferred stock, such as 8% Preferred, 7% Preferred, and 6% Preferred, in addition to an issue of common stock, there should be four different capital stock accounts. In other words, each kind of stock should be considered by itself for bookkeeping purposes, as if it were the only issue.

If the first method of opening the books which we have described, were adopted, and the stock issues were as indicated above, the following accounts should be opened:

Unissued 8% Preferred Stock.
Unissued 7% Preferred Stock.
Unissued 6% Preferred Stock.
Unissued Common Stock.
Authorized 8% Preferred Stock.
Authorized 7% Preferred Stock.
Authorized 6% Preferred Stock.
Authorized Common Stock.
Subscribers to 8% Preferred Stock.
Subscribers to 7% Preferred Stock.
Etc., etc.

In short, the same kind of entries would be necessary for each class of stock, as have been outlined, whatever method of opening the books is followed. The stock accounts of several issues should not be merged into one general stock account.

QUESTIONS

Lesson 34

1. In what respects are the journal entries opening the books of a partnership similar to the journal entries opening the books of a corporation? In what respects do they differ?

2. In what way does Capital Stock account control the Stock Ledger?

3. Explain how the two principally different ways of opening the books of a corporation differ in respect to giving expression to facts relative to the capital stock of the corporation.

4. Fuller & Johnson, partners doing a general mercantile business and sharing profits and losses equally, incorporated on July 1, under the name of The Fuller-Johnson Co., with an authorized capital of $500,000, consisting of 5,000 shares of $100 par value each.

The new corporation bought the net assets of the old partnership as shown by its balance sheet of June 30 for $194,300 payable in stock. In addition to that Fuller agreed to purchase 150 shares in the new company and Johnson 100 shares. Other subscriptions were as follows: Filmore, 10 shares; Rathbone, 20 shares; Jasper, 5 shares; and McBurney, 60 shares. These subscriptions were payable, 50% on date of incorporation and 50% one month later; and were so paid.

The balance sheet of Fuller & Johnson at June 30 was as follows:

FULLER & JOHNSON

BALANCE SHEET, JUNE 30, ——

ASSETS			LIABILITIES		
Current Assets:			Current Liabilities:		
Cash	$ 45,000		Notes Payable	$ 40,000	
Customers' Accts.	100,000		Accounts Payable	97,000	
Inventories	98,000		Accrued Wages	3,000	
			Accrued Interest	200	
Total Current Assets		$243,000	Total Current Liabilities		$140,200
Securities Owned		15,000	Mortgage Payable		50,000
Property		125,000	Deferred Credits		2,500
Deferred Charges		4,000	Partners' Capital Accounts:		
			Fuller	100,000	
			Johnson	94,300	194,300
Total		$387,000	Total		$387,000

Prepare the journal entries opening the books of the new corporation in two different ways, including the issue of stock to subscribers upon payment in full of their subscription.

5. What objection, if any, would there be to having one Capital Stock account credited with the total issue of the various kinds of preferred and common stock so that the total amount of all classes of stock issued might be conveniently found in one account?

LESSON 35

CORPORATIONS
OPENING AND OTHER ENTRIES

1. Introductory

In the preceding lesson it was assumed, for the sake of making the entries as simple as possible, that stock was issued for cash and cash only; not that the entries are any more difficult to understand when stock is issued for property, services and cash, but when cash is the only consideration the entries are naturally shorter.

Practically all that the accountant does in opening the books of a corporation is to debit accounts representing the assets acquired by the business, to credit accounts representing liabilities assumed (if any) and to credit some kind of capital stock account with the stock issued in exchange for the net assets received. The problem may, therefore, be said to resolve itself into merely a matter of getting the detail of the value received (less possible liabilities) and finding out the kinds and amounts of stock issued therefor. In addition to that the amount of authorized capital stock should be known. These facts are not hard to obtain. They are usually to be found in the minute book. Therefore, the question might well be asked, "What is so difficult about opening the books of a corporation?" The answer is simple. There is nothing difficult about it at all.

2. Entries When Stock is Sold for Cash, Property or Services

As has been told, capital stock is not always issued for cash exclusively. Very often it is issued partly for cash, and partly for property and/or services rendered. When property or services are included in the consideration of a stock issue, it is necessary to be supplied with the detail of the property acquired and with

information concerning the nature of the services rendered, in order to make the proper opening entries. Then it is just a matter of debiting asset accounts according to the kinds of assets, acquired and of debiting (usually) deferred expense accounts, according to the nature of the services rendered. The corresponding credit may be to the account or accounts of the person or persons who sold the property to the corporation or who rendered the services. In this case these personal accounts would be charged with the par value of the stock issued for the property or services. Thus the personal accounts would be balanced. Another bookkeeping method would be to ignore the personal accounts, which at best are merely clearing accounts, and to credit Capital Stock account directly. For example, the entries might be made according to either of the two following ways, using round figures to illustrate:

Method No. 1:

Property	$50,000.00	
Services	2,000.00	
A		$28,000.00
B		22,000.00
C		2,000.00
For property acquired by, and for services rendered to, the corporation.		

A	$28,000.00	
B	22,000.00	
C	2,000.00	
Capital Stock		$52,000.00
For capital stock issued to A, B, and C.		

Method No. 2:

Property	$50,000.00	
Services	2,000.00	
Capital Stock		$52,000.00
For stock issued to A, B, and C in payment for property acquired and services rendered.		

If it were desired to include in the opening journal entry the amount of cash paid in (and this is usually desirable in order to have a complete record of the opening transactions in one place), the journal entry would be somewhat as follows (the figures used have no connection with any foregoing entries):

Cash	$45,000.00	
Property	60,000.00	
Services	5,000.00	
Capital Stock		$110,000.00

The cash would, of course, be entered again in the cash book for the sake of the cash record, but to avoid double posting there should be a memorandum in the cash book to the effect that the item had been posted from the journal.

The foregoing entries were put in summary form merely to convey the general idea. The entry illustrated by Method No. 2 should actually show more detail, however. Assuming that the property acquired consisted of land, buildings and equipment, and that the services rendered were in connection with organizing the corporation, the entry would be somewhat as follows:

Land	$ 8,000.00	
Buildings	30,000.00	
Equipment	12,000.00	
Organization Expense	2,000.00	
Capital Stock		$52,000.00
For issue today of 520 shares of		

capital stock for property acquired and for value received in services rendered to the corporation, complete detail of which may be found in the minutes of the meeting of stockholders (or directors) on Sept. 5, 1922.

There is no peculiar feature of accounting involved in the preparation of the foregoing journal entry. The law of debit and credit governs this entry in the same way as it governs an entry for a cash disbursement or for a similiar transaction, the main difference being that the obligation in this case is paid in capital stock, instead of in cash.

The plan of first crediting personal accounts with the property and other value, and then closing them with a corresponding debit for capital stock issued, is not unlike the method of crediting an account payable with merchandise bought on credit, and then charging the same account with the amount of cash paid in settlement thereof.

While it was assumed in the foregoing transactions that the charge for services was for work done in connection with the organization of the corporation, the services might have been rendered in some other way, in which case the name of the account would have been altered accordingly.

3. Installment Accounts

When subscriptions to capital stock are payable in installments, it is not unusual to open an account for each installment as it becomes due. In such cases Installment account is charged and Subscribers account is credited with the total amount of installments due from all subscribers. Furthermore, the installment accounts are numbered, as for instance, Installment No. 1, Installment No. 2, and so on. As cash is received from subscribers, it is

credited to the installment account to which it applies. Thus a balance in any installment account outstanding for more than a reasonable time would mean that one or more subscribers had failed to respond to the call.

The advantage of this method of bookkeeping may be plainly seen when it is considered that the amount due and payable by subscribers is thus taken out of Subscribers account and set up in a separate account. This leaves Subscribers account with a balance representing only the proportion of the total subscriptions that is not yet payable.

It is customary to use an installment book as each installment falls due. In this book are listed the names of the subscribers and the amount due from each on account of the installment. A money column is left for the purpose of entering the amount received from subscribers. Thus the installment book becomes the subsidiary record in support of the respective general ledger installment accounts. The total of the open or unpaid amounts appearing in the installment book should equal the balance of the installment account in the same way as the total of the open items in the voucher register should equal the balance of Vouchers Payable account. In fact, the arrangement of the Installment book is not unlike that of the Voucher Register.

Following is an illustration of an installment book that might be kept:

INSTALLMENT BOOK

Installment No. 1..................................60% due September 1, 1922
Installment No. 2..................................40% due November 1, 1922

Subscriber and Address	Amount of Subscription	Amount of Installment No. 1	Paid	Amount of Installment No. 2	Paid
A, 14 W. 96 St., New York City	$500.00	$300.00	Sept. 1	$200.00	Nov. 1
B, Wallkill, N. Y.	300.00	180.00		120.00	
C, Middletown, N. Y.	200.00	120.00	Sept. 2	80.00	
D, 14 S. Crouse Ave., Syracuse, N. Y.	400.00	240.00		160.00	

If it should happen that any individual installment was paid "on account," the amount paid would have to be interlined in the "Paid" column, if the form illustrated above were used. Also changes in the list would have to be made if subscription rights were sold or otherwise transferred.

4. Opening the Books of an Incorporated Partnership

To illustrate the incorporation of a partnership, we will assume that Smith and Brown, who had been doing business for a number of years as partners, decided to incorporate at Dec. 1, 1922, and to turn over the active management of affairs to someone else. An after-closing trial balance of the partnership at the date of incorporation was as follows:

Cash	$ 10,426.30
Customers' Accounts	35,322.10
Notes Receivable	16,430.30
Merchandise	28,660.45
Office Furniture	4,500.00
Stocks and Bonds........................	9,226.00
Delivery Equipment	3,910.75

Land and Buildings	8,400.00	
Interest Paid in Advance	136.90	
Unexpired Insurance	235.10	
Notes Payable		$ 10,000.00
Accounts Payable		25,692.13
Accrued Salaries		436.15
Accrued Taxes		125.00
Mortgage Payable		3,000.00
A. R. Smith Capital account		34,991.50
N. C. Brown Capital account		43,003.12
Total	$117,247.90	$117,247.90

More accounts could have been added to this trial balance but nothing would have been gained thereby as the accounting principles to be explained do not depend upon the number of accounts taken. Therefore only a few representative accounts were chosen for purposes of illustration.

As a help in getting the correct view-point in opening the books of an incorporated partnership, consider first that the partnership agrees to turn over all of its assets to the corporation in consideration for which the corporation agrees to assume the liabilities of the partnership and to issue stock in favor of the partnership to an amount equal to the net assets acquired. Next think of the stock received by the partnership as you would think of cash left over after realization and liquidation proceedings had been completed, to be divided among the partners according to their interests in the business. The only difficulty in connection with the division of the stock is that shares of stock are usually issued in amounts of even dollars such as $100.00, $50.00, $25.00, $10.00 or $1.00. If the capital interests should not be in even multiples of the par value of the stock issued, some minor cash adjustments among the partners would probably be made in order that the stock could be properly divided.

It might (and usually would) also happen that the amount of the net assets as determined from a balance sheet of the partnership, would not be a multiple of the par value of the stock. For example, the trial balance of Smith and Brown shows net assets of $77,994.62. In this case it would be considered proper to adjust the value of one of the assets, say buildings, by arbitrarily increasing its value $5.38 (this amount to be credited to partners' capital accounts in the profit and loss sharing ratios). This adjustment would increase the net assets to $78,000.00, for which 780 shares of stock of a par value of $100.00 each could then be easily issued.

If this above-mentioned credit of $5.38 were credited to the capital accounts of Smith and Brown, say one-half to each account, the capital accounts would appear as follows:

Smith	$34,994.19
Brown	43,005.81
Total	$78,000.00

If Smith should pay into the partnership $5.81 and Brown should withdraw this amount, the capital accounts of the two partners would appear as follows:

Smith	$35,000.00
Brown	43,000.00
Total	$78,000.00

Then the stock could be easily divided, 350 shares to Smith and 430 shares to Brown.

Let us assume that the foregoing minor adjustments were actually made in order to facilitate a settlement, first as between the corporation and the partnership and second as between

the individual partners. The trial balance would then appear as follows:

Cash	$ 10,426.30	
Customers' Accounts	35,322.10	
Notes Receivable	16,430.30	
Merchandise	28,660.45	
Stocks and Bonds	9,226.00	
Office Furniture	4,500.00	
Delivery Equipment	3,910.75	
Land and Buildings	8,405.38	
Interest Paid in Advance	136.90	
Unexpired Insurance	235.10	
Notes Payable		$ 10,000.00
Accounts Payable		25,692.13
Accrued Salaries		436.15
Accrued Taxes		125.00
Mortgage Payable		3,000.00
A. R. Smith Capital account		35,000.00
N. C. Brown Capital account		43,000.00
Total	$117,253.28	$117,253.28

To record the taking over by a corporation of the assets and liabilities of a partnership, some accountants advocate the following entries, based on accounts and balances appearing in the foregoing trial balance:

Plant and Sundry Assets	$117,253.28	
Smith and Brown		$117,253.28
For the purchase price of plant and sundry assets acquired this day from the firm of Smith and Brown in consideration of, etc.		

Smith and Brown	39,253.28	
Sundry Liabilities		39,253.28
For liabilities of Smith and Brown assumed as part payment of assets acquired from that firm today, etc.		
Unissued Stock	$100,000.00	
Authorized Capital Stock......		$100,000.00
For amount of authorized stock (assuming an authorized issue of $100,000.00).		
Smith and Brown	78,000.00	
Unissued Stock		78,000.00
For 780 shares of stock issued to Smith and Brown in payment of net assets acquired today, etc.		
Cash	10,426.30	
Customers' Accounts	35,322.10	
Notes Receivable	16,430.30	
Merchandise	28,660.45	
Stocks and Bonds	9,226.00	
Office Furniture	4,500.00	
Delivery Equipment	3,910.75	
Land and Buildings	8,405.38	
Interest Paid in Advance..........	136.90	
Unexpired Insurance	235.10	
Plant and Sundry Assets........		117,253.28
To set up accounts for the various assets acquired from the firm of Smith and Brown, etc.		

Sundry Liabilities	39,253.28	
Notes Payable		10,000.00
Accounts Payable		25,692.13
Accrued Salaries		436.15
Accrued Taxes		125.00
Mortgage Payable		3,000.00

To set up ledger accounts for the various liabilities of Smith and Brown assumed by this company, etc.

The ledger account of Smith and Brown on the books of the corporation would appear as follows, after the foregoing entries had been posted:

SMITH AND BROWN

Sundry Liabilities	$ 39,253.28	Sundry Assets	$117,253.28
Capital Stock	78,000.00		
Total	$117,253.28	Total	$117,253.28

In our opinion the recording of the incorporation, in a case like the above, can be done in a much shorter and simpler way by the use of only one journal entry such as the following one, which gives the same final result. This entry, it will be noticed, is an exact copy of the trial balance of Smith and Brown with "capital stock" substituted for the capital accounts of Smith and Brown.

Cash	$ 10,426.30
Customers' Accounts	35,322.10
Notes Receivable	16,430.30
Merchandise	28,660.45
Stocks and Bonds	9,226.00
Office Furniture	4,500.00

Delivery Equipment	3,910.75	
Land and Buildings	8,405.38	
Interest Paid in Advance..........	136.90	
Unexpired Insurance	235.10	
Notes Payable		$ 10,000.00
Accounts Payable		25,692.13
Accrued Salaries		436.15
Accrued Taxes		125.00
Mortgage Payable		3,000.00
Capital Stock		78,000.00

To record the issuance of 780 shares of capital stock to Smith and Brown as payment in full for assets acquired from them today, less the amount of their liabilities assumed by this company, the assets and liabilities being as shown above.

It will be further noticed that the amount of capital stock equals the combined capital accounts of Smith and Brown. When a partnership is incorporated practically all that happens to the general ledger accounts is that the capital accounts of the partners are changed to a single account representing stock ownership. A short cut method (but, of course, an improper one) would be to rule off the partners' capital accounts and carry their balances in the aggregate to a capital stock account. This remark is made merely to express what the whole procedure of incorporating a partnership amounts to, in a nut shell.

The foregoing remarks assume that all necessary adjustments have been made on the books of the partnership in preparation for the incorporation, even including the setting up of a good-will account, if good-will is to be sold to the corporation.

The accounting procedure connected with the sale of good-

will to a corporation is no different from the procedure when good-will is set up upon the admission of a new partner. Therefore, we will not discuss the subject at this point, further than to say as a matter of review that when a partnership sells its business for more than its net assets, the difference is presumed to be good-will, and that therefore the net assets are arbitrarily increased to equal the sales price by the setting up of a Good-Will account for the difference. The good-will thus established on the books is considered a profit of the business which has been realized on the sale of its assets. Therefore, when Good-Will account is charged, the corresponding credit must be to partners' capital accounts, the amounts credited to each depending upon the profit-sharing ratios. For example, if Smith and Brown had sold their business for $80,000.00 instead of $78,000.00 they should have set up good-will on their books by charging Good-Will account with $2,000.00 and crediting Smith's capital account $1,000.00 and Brown's capital account $1,000.00 (if the partners shared profits equally). Then the net assets turned over to the corporation would have been $80,000.00 instead of $78,000.00 and the opening journal entry would have shown among the assets an item of good-will amounting to $2,000.00 which does not appear in the opening entry shown on pages 11 and 12 of this lesson.

If the partners incorporate merely for the purpose of changing their form of organization, and not as a sale to outside interests, it is presumed that they would issue stock to the exact amount of their capital interests in the partnership, thus avoiding any problems incident to the creation of a good-will account, because the opening of a good-will account would indicate a profit on what would amount to a sale of the business to themselves. Such procedure might be questioned on the grounds of policy and also might be opposed by the partner whose profit sharing ratio was less than that of his co-partners.

But if the partners did issue stock to themselves in excess of their capital investments in the partnership, this excess which, for

bookkeeping purposes, would be considered a profit, is not considered as taxable profit by the United States government according to Section 202-(3A) of the 1921 law.

Article 1566, Regulations 62, interpreting Section 202-(3A), declares that no gain or loss is recognized where "two or more persons transfer any such property to a corporation (such property referring to property held by them as partners) and immediately after the transfer are in control of such corporation, and the amounts of stock, securities, or both, received by such persons are in substantially the same proportion as their interests in the property before such transfer."

The regulations also provide that "for the purposes of this paragraph two or more persons are 'in control' of a corporation when owning at least 80% of the outstanding voting stock and at least 80% of the total number of outstanding shares of all other classes of stock of the corporation."

But if the partners sold their net assets to a corporation of which they did not own the controlling interest for stock with a readily realizable market value in excess of the book value of their net assets, the excess would be taxable as profit.

If in admitting a new partner no mention is made of what his interest in the business shall be, but he is merely allowed credit for the capital he contributes, the question of good-will does not arise, nor the question of a tax on the profit incident to the sale of good-will to the new partner.

5. Closing the Books of a Partnership Which Has Been Incorporated

Closing the books of a partnership that has been incorporated is practically the reverse of opening the books of the new corporation formed from a partnership.

Taking the same trial balance of Smith and Brown used pre-

viously and omitting the detail of assets and liabilities, we have the following:

Sundry Assets	$117,253.28	
Sundry Liabilities		$ 39,253.28
Smith Capital account		35,000.00
Brown Capital account		43,000.00
	$117,253.28	$117,253.28

From this we may prepare the closing entries (explanations omitted) as follows:

Stock of - - - Company	$ 78,000.00	
Sundry Liabilities	39,253.28	
Sundry Assets		$117,253.28
Smith Capital account	35,000.00	
Brown Capital account	43,000.00	
Stock of - - - Company		78,000.00

6. Opening the Books of a Corporation Formed from Several Partnerships

When several partnerships combine to form a corporation, the entries are in principle no different from those outlined in connection with the incorporation of a single partnership. The thing to do in this case is to add the assets and liabilities of the same kind derived from the various partnerships and to make one entry for the combined total, or else to make separate journal entries for each partnership in accordance with the methods already explained. Usually, when several partnerships combine for the purpose of incorporating, there is an agreement as to how the assets of each partnership shall be valued and as to the division of the stock, but this does not alter the accounting procedure in any way. If the agreement calls for the issue of stock to any partnership in excess

of its net assets, a good-will account is accordingly created on the books of that particular partnership, irrespective of conditions affecting the other partnerships.

7. Entries for Treasury Stock

Treasury stock comes into the possession of a corporation usually as a gift from one or more of the promoters, although it may also be acquired by purchase, as has been explained in previous lessons.

If acquired as a gift, treasury stock may be set up on the books at par, or at fair market value, or at a nominal valuation, but whatever valuation is used, the corresponding credit should be to an offset account such as, for example, Reserve for Donated Treasury Stock, and not to Profit and Loss. One reason why Profit and Loss account should not be credited is because there is no profit from the transaction at the time the stock is received. A profit can be realized only when the stock is sold. Therefore, to credit Profit and Loss for an arbitrary amount representing the valuation used to set up the Treasury Stock on the books, would only be "anticipating" profits, which violates an accounting rule mentioned in one of the lessons on the statement of income and profit and loss. Furthermore, if the valuation were overstated, the profit would likewise be overstated. But there is still another reason why Profit and Loss account should not be credited even with the actual proceeds from the sale of the Treasury Stock. And that is because such profits should not be available for dividends. If the proceeds from the sale of Treasury Stock were available for distribution to stockholders, and were so distributed, the purpose for which the Treasury Stock had been donated, namely to raise cash for working capital, would be defeated.

The proper entries in connection with the receipt and subsequent sale of Treasury Stock may be illustrated as follows, assuming the stock to have been set up on the books at par ($100.00) but to have been sold at $90.00 a share:

FIRST METHOD:

No. 1

	Dr.	Cr.
Treasury Stock	$10,000.00	
Reserve for Donated Treasury Stock		$10,000.00
To record the receipt today of 100 shares of capital stock of the par value of $100 each. This stock was received from............. to be sold for the purpose of raising working capital. The stock thus acquired is taken up on the books at its par value ($100).		

No. 2

	Dr.	Cr.
Cash	$ 9,000.00	
Treasury Stock		$ 9,000.00
For sale today of 100 shares of Treasury Stock at $90 per share.		

No. 3

	Dr.	Cr.
Reserve for Donated Treasury Stock	$ 1,000.00	
Treasury Stock		$ 1,000.00
To write off the difference between the valuation ($10,000.00) set upon 100 shares of treasury stock when they were received and the amount actually realized from the sale thereof ($9,000.00).		

No. 4

	Dr.	Cr.
Reserve for Donated Treasury Stock	$ 9,000.00	

Surplus from Sale of Donated Treasury Stock .... $ 9,000.00

It will be noticed that Treasury Stock account was debited with $10,000.00, the value set upon the stock when it was received, and that the corresponding credit was to Reserve for Donated Treasury Stock. As only $9,000.00 was received from the sale of the stock, Treasury Stock account was left with a debit balance of $1,000.00 which, however, did not represent any asset value in the business because all the stock had been disposed of. This balance was therefore "written off" against the account which was originallv credited with the value of Treasurv Stock, namely, Reserve for Donated Treasury Stock account.

After this entry was posted, Reserve for Donated Treasury Stock account showed a credit balance of $9,000.00, which represented the actual amount realized from the sale of the donated stock, and therefore the actual profit.

This balance, instead of being closed out into Profit and Loss account, was transferred for safe keeping to an account called Surplus from Sale of Donated Treasury Stock, from which it could not be properly taken for distribution to shareholders. The nature and purpose of surplus accounts will be discussed in the next lesson.

In the foregoing it was assumed that the treasury stock was sold for less than the value, which, for bookkeeping purposes, was placed upon it when it was received. Suppose, however, that it had been given a nominal valuation and that it realized more than that amount. The entries in this case would be practically the same as before, except that, as can be plainly seen, Treasury Stock account would develop a credit balance and this would be transferred to the credit of Reserve for Donated Treasury Stock account, whereas in the previous case the balance, being debit, was charged to the reserve account. The final entry in the second case would transfer the credit balance of the Reserve account to Surplus from Sale of Donated Treasury Stock account, as in the first case.

SECOND METHOD:

Some accountants are of the opinion that the amount realized from the sale of treasury stock should be applied as partial offset to the cost of the property acquired by the original issue of the stock; and that therefore the credit balance left in Reserve for Donated Treasury Stock account should be transferred to the credit of property account, or accounts, rather than to the credit of Surplus from Sale of Donated Treasury Stock account.

When the entire capital stock of a corporation is issued to the promoters in exchange for property received from them, and when the promoters immediately donate back to the company a certain amount of that stock to be sold at less than par, it may be difficult to believe in some cases that the purpose of such action was not to evade the spirit of the law, which requires stock to be sold at "par or better." Therefore, there might appear to be weight to the argument that the valuation of the property was overstated and that it should be reduced by the amount realized from the sale of the donated treasury stock. But to pass the credit to the property accounts without the permission of the board of directors, would be the equivalent of assuming their legal prerogative of valuing property acquired. If the directors gave their permissions for the entry, they would in effect be obliged to go on record as admitting that they had overvalued the property in the first place. Therefore, it is doubtful that their permission could be obtained.

Furthermore, crediting the property account would be no more conservative practice than creating a capital surplus account. For these reasons we believe the first method is preferable.

8. Entries for Purchase of Stock

The entries for the purchase by a corporation of its own stock, when such purchase is permitted, are not unlike the entries for donated treasury stock, except that cash is credited for the purchase price. The stock may still be set up on the books at par by credit-

ing the difference between the purchase price and par value to an account called Reserve for Purchased Treasury Stock, if the purchase price is less than par. If the purchase price should be more than par, the difference could be charged to an account called Premium on Purchased Treasury Stock. In the former case the Reserve for Purchased Treasury Stock would be adjusted if the Treasury Stock was sold for more or less than par and then closed into Surplus from Sale of Purchased Treasury Stock account, or similar Capital Surplus account.

Another method would be to charge Treasury Stock at the purchase price. Profits on the resale should be credited to the Capital Surplus account; losses should be charged to Profit and Loss.

9. Treasury Stock Preferably Carried at Par

It is, on the whole, preferable to carry Treasury Stock at par, and to create offsetting reserves, if necessary, because in preparing a balance sheet treasury stock should, in our opinion, be deducted from the balance of Capital Stock account to show the net amount of capital outstanding in the hands of the public. Balance sheets are sometimes prepared showing the Treasury Stock account among the assets, and there may be some foundation for this position. We believe it is just as logical to consider Treasury Stock as a reduction of an accountability or liability to stockholders as it is to consider it as an asset. In some respects it is even more logical to do so, as Treasury Stock has no voting power nor right to receive dividends.

10. Entries for Bonus Stock

In floating a new enterprise it is not uncommon to offer a certain number of shares of common stock as a "bonus" to purchasers of preferred stock or of bonds in order to make the purchase of the preferred stock or of the bonds more attractive. Bonus stock should be fully paid, otherwise the recipient will receive it subject to the possibility of being called upon later to pay something

for it. For this reason, bonus stock is usually treasury stock.

If the treasury stock was donated, the stock may be given as a bonus without expense to the corporation. The entry in this case might be the reverse of the original entry setting treasury stock up on the books. An illustration of the two entries follows:

ORIGINAL ENTRY

Treasury Stock	$ 9,000.00	
Reserve for Donated Treasury Stock		$ 9,000.00
To record the receipt of 90 shares of capital stock of the company as a gift from, etc.		

REVERSING THE ORIGINAL ENTRY

Reserve for Donated Treasury Stock	$ 9,000.00	
Treasury Stock		$ 9,000.00
To record the giving of 90 shares of treasury stock to purchasers of preferred stock as a bonus, etc.		

11. Entries for Forfeited Stock

Occasionally, subscribers who have made one or two payments on account of their subscriptions default on the balance. In some states the partial payments must be returned to the subscribers, after deducting a certain amount, possibly, as expenses. In other states the payments may, under certain conditions, be declared forfeited. In such a case the money received by the corporation is profit, but like the amount realized from donated stock, the profit should not be credited to Profit and Loss account. It is not operating profit; it is capital profit and should be credited to a capital surplus account, unless the amount is so small that it would not be worth while creating a capital surplus. In that case the practical

method is to credit Profit and Loss account. The entry would be substantially as follows:

Subscribers	$10,150.00	
Surplus from Forfeited Subscriptions		$10,150.00
To charge back to subscribers' accounts the amounts credited to them as partial payments of their subscriptions now declared forfeit.		

This entry should be followed by one crediting Subscribers account and debiting Subscribed Capital Stock account (or whatever account was originally credited when Subscribers account was set up) for the amount of subscriptions declared forfeited, in order to clear these subscriptions from the books.

12. Entries for Bond Issues

Entries to record the issue of bonds are in the main the same as entries to record the issue of stock, and therefore it is not necessary to go into the subject in respect to those points wherein bond issues correspond to stock issues. For example, bonds may not be issued for the full amount authorized by the stockholders and directors. Therefore, there may be accounts with Unissued Bonds and Authorized Bonds corresponding to Unissued Stock and Authorized Stock accounts, which have been described.

The name of the bond account should clearly indicate the nature of the issue by including a brief, but fairly complete, description of the bonds, as for example: First Mortgage, 5% Bonds, due 1940; or Refunding Mortgage, 6% Gold Bonds, due 1932. This description should indicate at least the kind of bond, the interest rate, and the maturity date.

Following are entries illustrating the issue of bonds for cash and the issue of bonds for property:

Cash	$100,000.00	
First Mortgage, 6% Bonds, due 1960		$100,000.00

Land	140,000.00	
Buildings	200,000.00	
Purchase Money, First Mortgage, 5% Bonds, due 1950		340,000.00

It is usual for a corporation to engage the services of a banker to float an issue of bonds, although the corporation may attempt to sell the entire issue directly to the public itself. In the former case, the bonds are usually sold to the banker, or banking syndicate at a price below par, say 95. The syndicate, which is usually composed of a number of bond houses, then advertises the bonds for sale to the public at say 98 or 100. The difference in price between 95 and 98 or 100 represents the commission earned by the syndicate.

If bonds are sold below par the entry should be somewhat as follows:

Bond Discount	$ 50,000	
Cash (or Banking Syndicate)	950,000	
First Mortgage, 5% Bonds, due 1946		$1,000,000
For sale at 95 of 1,000 bonds, par value $1,000.		

If bonds should be sold above par the entry should be somewhat as follows:

Cash (or Banking Syndicate)	$1,020,000	
Bond Premium		$ 20,000
First Mortgage, 5% Bonds, due 1946		1,000,000
For sale at 102 of 1,000 bonds, par value $1,000.		

What is done subsequently with Bond Discount and Bond Premium accounts will be discussed in a later lesson.

If two or more kinds of bonds are issued there should be ledger accounts representing each kind, just as there should be separate ledger accounts for common and for preferred stock, and even for the different kinds of common and preferred stock.

QUESTIONS

Lesson 35

1. Why would it not be a good plan to open an account in the general ledger of a large corporation for each stockholder?

2. The Blank Manufacturing Company was organized on April 1, 1922, with an authorized capital stock of $800,000, consisting of 8,000 shares of common stock of the par value of $100 each, to take over the business of Brown & Black, partners engaged in the manufacture of automobile parts. The partners shared profits and losses equally.

Subscriptions to the capital stock amounted to $400,000, of which $390,000 was paid on April 15, the balance being payable, $5,000 on April 30 and $5,000 on May 15.

The stockholders and board of directors agreed to issue $327,000 of stock to Brown & Black for their net assets (exclusive of cash, which it was agreed should be withdrawn by Brown), as shown on their before-closing trial balance of March 31, 1922, after deducting depreciation on buildings at the rate of 5% per annum, on office equipment at the rate of 10% per annum, and on machinery and heating system at the rate of 15% per annum.

It was also agreed that a reserve should be set up for uncollectible accounts to equal 5% of the customers' accounts outstanding at March 31, and that the book value of patterns and small tools and dies, as shown by the above mentioned trial balance, should be written off 50%. All other accounts were to be accepted at the valuations shown on the before-closing trial balance.

Brown & Black started in business as partners on July 1, 1921, and kept their accounts on an accrued basis, as far as insurance, interest, taxes, salaries and wages were concerned, but they had never closed their books prior to the sale to the Blank Company.

Inventories were taken as of March 31, 1922, and valued as follows: Material, $50,910.60 (including $1,296.20, the creditors' bills for which, it was found, had not been recorded on the books at March 31); Work in Process, $57,150.65; Finished Goods, $2,700.20; and Factory Supplies, $243.70.

A before-closing trial balance as of March 31 of the the general ledger of Brown & Black was as follows:

Account	Debit	Credit
Cash	$50,412.50	
Customers' Accounts	60,910.25	
Inventory—Materials	54,720.40	
Inventory—Supplies	290.10	
Land	8,000.00	
Buildings	92,470.00	
Heating System	6,230.00	
Machinery	80,496.20	
Small Tools and Dies	3,460.00	
Patterns	875.22	
Office Equipment	2,200.00	
Inventory Stationery	420.90	
Lighting Supplies	25.00	
Prepaid Insurance	453.00	
Advertising Material	70.00	
Suspense Account	597.22	
Accounts Payable		$ 22,000.71
Accrued Payroll		375.00
W. R. Brown, Capital account		153,741.27
P. M. Black, Capital account		128,048.20
Sales, Special Orders		471,420.00
Compressometer Sales		510.72
Wick Sales		650.19
Sundry Sales		759.00
Pump Sales		8,500.00
Pump Jr. Sales		410.00
Sub-Case Oiler Sales		1,592.00
Oil Bolt Sales		150.00
Grease Cup Sales		400.86
No. 3 Gun Sales		1,608.50
Grease Bolt Sales		143.27
Nut Sales		326.42

Interest Earned....................................		6,620.50
Purchases of Material and Supplies	275,923.62	
Labor, Direct and Indirect................	129,810.73	
Power and Heat.................................	4,620.00	
Miscellaneous Factory Expense..........	800.00	
Freight and Express...........................	5,910.60	
Salaries	11,541.00	
Insurance	1,360.00	
Commissions	3,850.25	
Collection Expense.............................	25.00	
Traveling Expense..............................	125.40	
Taxes	427.90	
Interest Expense.................................	30.60	
Discount Allowed...............................	1,200.75	
Total	$797,256.64	$797,256.64

Close the books of Brown & Black, showing all the necessary journal entries, including the distribution of the stock of the Blank Company to each of the partners. For the purpose of facilitating the distribution of the stock, Black paid into the firm $140.29 which was withdrawn by Brown. In effect, Black paid Brown $140.29.

Close all accounts representing the cost of manufacture into Cost of Manufacture account and the balance of that account into Cost of Goods Sold account, before closing nominal accounts into Profit and Loss account.

3. If you were given question 2 in a C. P. A. examination where your time would necessarily be limited, explain your method of procedure to insure yourself against overlooking something and to avoid becoming confused by the various adjustments which are called for.

4. When and why are installment accounts used in connection with the issue of capital stock?

5. The promoters of Corporation A, who received the entire issue of its capital stock, amounting to 600,000 shares of the par value of $25 each, donated back to the company 25,000 shares

to be sold for working capital or to be otherwise disposed of at the discretion of the board of directors.

The company sold 20,000 shares at $15 a share and gave the balance away as a bonus for an issue of $250,000 Debenture Bonds. Submit the journal entries to give effect to these transactions, assuming that the donated stock was valued at $20 per share when it was received.

LESSON 36

CORPORATIONS
SURPLUS, RESERVES AND OTHER SPECIAL ACCOUNTS

1. Introductory

The previous lessons on corporation accounting have treated mainly of the advantages and disadvantages of the corporate form of organization, of the control and management of a corporation, and of entries in connection with the issue of stocks and bonds. This lesson will consider the significance and treatment of certain special accounts, some of which are found only on the books of corporations, others of which are found there frequently but not exclusively. In certain respects this lesson is a continuation of the subject begun in the first volume under the general heading of "The Significance and Treatment of Balance Sheet Accounts."

2. Surplus Account

Broadly speaking, the surplus of a corporation is the excess of its assets over its liabilities and capital stock combined. In accounting practice, however, the simple name Surplus account is used quite generally to signify that portion of the whole surplus which has been earned through the ordinary operations of the business and is available for dividends.

Note the three conditions. The balance of Surplus account should represent:

Surplus that has been earned.

Surplus that has been earned through the ordinary operations of the business.

Surplus that has been earned though the ordinary operations of the business and is available for dividends.

In the following section entitled "Special Surplus Accounts" are explained the origin and nature of surplus which is not earned, and the origin and nature of surplus which is earned, but not through the ordinary operations of the business. In the sections following that are explained the true reserves, or surplus which, while it is earned through the ordinary operations of the business, is not available for dividends.

The credit balance in Surplus account is sometimes spoken of as "free" or "unappropriated" surplus, because it may be paid out in dividends if the directors so decide, whereas the balance in a special surplus account is not ordinarily available for distribution to shareholders, although in some cases there may be no legal nor moral reason why it may not be thus disbursed.

The regular surplus account is created by transferring to it the credit balance of Profit and Loss account. We are aware that it is often the practice to charge Surplus account with "prior period" expenses and losses of an unusual nature, and similarly to credit it with "prior period" earnings and profits of an unusual nature; but in our opinion this is not the best practice. Surplus account should not be burdened with such items. Instead, such items should be charged or credited to Profit and Loss account or to "Surplus Adjustment" account, preferably to the former, so that *all* the amounts to be included in a statement of income and profit and loss may be found in *one account* in the general ledger. How the "prior period" and unusual items charged or credited to Profit and Loss account should then be reported on a statement of income and profit and loss has already been discussed.

A summary of the nature of items debited and credited to Surplus account follows:

SURPLUS ACCOUNT

Debited With	Credited With
(1) Debit balance transferred from Profit and Loss account.	(1) Credit balance transferred from Profit and Loss account.

(2) Amounts specially reserved.	(2) The return of amounts specially reserved, after the purpose for which such amounts were reserved has been fulfilled.
(3) Dividends declared.	

A credit balance in this account represents profits that have been earned and are also available for dividends. A debit balance represents an apparent "deficit" or impairment of capital, which would be a real deficit if there were no special surplus accounts showing credit balances in excess of this debit balance.

Because a debit balance in Surplus account may represent a deficit or impairment of the capital of a business, some accountants call this account "Surplus or Deficit" instead of just "Surplus" account. Another name which may be found is "Undivided Profits" account, or there may be found an Undivided Profits account in addition to Surplus account. In this latter case Surplus account is in the nature of a reserve account. The point of these remarks is that there is no absolutely fixed rule about naming any ledger account. Certain names like Cash account, however, have become standard through custom.

3. Special Surplus Accounts

Three kinds of special surplus accounts which might be mentioned are as follows:

(1) Surplus From Sale of Donated Treasury Stock.
(2) Surplus From Stock Sold at a Premium.
(3) Surplus From Revaluation of Fixed Assets.

The first and second are surpluses that are contributed rather than earned. The third is an example of surpluses which are earned, but which are not earned through the ordinary operations of the business.

As Surplus from Sale of Donated Treasury Stock account

was discussed in the previous lesson, no further mention will be made of it here.

When a bank is organized the incorporators often subscribe for the stock at a premium in order to create a surplus at the start. The entry therefore for opening the books of a bank might be as follows:

Cash	$550,000	
Capital Stock		$500,000
Surplus		50,000
For the sale at $110 of 5,000 shares of capital stock of a par value of $100.		

In this case the account would be called simply Surplus, but this would in reality be a special surplus account. Undivided Profits account and Surplus account in a bank correspond respectively with Surplus account and a Reserve account in an ordinary mercantile business.

Such surplus is not earned through the ordinary operations of the business. It is in effect donated by the incorporators.

There may be various reasons why the incorporators start the bank with a paid-in surplus. A bank, perhaps more than any other institution, must have a surplus in order to inspire the confidence of the class of persons with whom it does business. The amount of surplus also determines to a certain extent the amount of loaning power of a bank. For example, national banks may loan to any one borrower an amount not to exceed ten per cent of its capital and surplus combined, provided that that amount does not exceed thirty per cent of its capital alone. This may be another reason why a bank may wish to start with a surplus.

The National Bank act (Section 5199) provides that "The directors of any association may semi-annually declare a dividend

of so much of the net profit of the association as they shall judge expedient; but each association shall, before the declaration of a dividend, carry one-tenth part of its net profits of the preceding half-year to its surplus fund until the same shall amount to twenty per centum of its capital stock." In other words, the directors can not pay out all of the profits in dividends until a surplus has been established equal to at least twenty per cent of the bank's capital.

The net earnings of a bank for a given period are credited to Undivided Profits account, any portion of which may be transferred by resolution of the board of directors to Surplus account. Usually some balance is left in Undivided Profits account, however, to meet possible losses in subsequent periods, because it would be embarrassing for the bank, and might seriously hurt its credit, if it were obliged to restore to Undivided Profits account any amount previously passed to Surplus account. This might obligate the bank to reduce or "call" one or more of its loans.

As has been stated before, it is not considered necessary either to increase or decrease the amount of fixed asset accounts of a going concern to conform with actual increases or decreases in the value of the fixed assets due to changes in economic conditions. For example, the value of a company's property might be enhanced by improvements to nearby property, but ordinarily no corresponding book adjustment would be made. If for any good reason, however, it may be desired to increase the book values of fixed assets (as perhaps when they are grossly understated), the offsetting credit should not be to Profit and Loss account for two reasons. First, because fixed assets are not as a rule held for sale, and secondly, even if they were available for sale, a book entry prior to a sale would be "anticipating a profit." Therefore conservative accounting practice dictates that the amount of increase of fixed assets decided upon as the result of an appraisal shall be credited to a special surplus account, rather than to Profit and Loss, which may be called "Surplus From Revaluation of Fixed Assets." In this case the Surplus is, from an accountant's point of view,

"earned," but it is not earned through the ordinary operations of the business. The economist, on the other hand, holds that it is "unearned increment."

An exception to the rule that Profit and Loss account should not be credited with the increase in value of fixed assets due to an appraisal or to any other cause is when the "write-up" is decided upon to offset excessive "write-offs" on account of depreciation or to offset additions to property which had been charged to Profit and Loss.

4. True Reserves

The difference between a so-called reserve like "Reserve for Depreciation" and a true reserve is in some respects not unlike the difference between an expense and a distribution of profit, which was brought out in one of the lessons on partnerships. There it was shown that when interest on partners' capital is considered an expense of the business it is charged to Profit and Loss account before the final profit is determined, but when it is considered as a distribution of profit, it is charged to Profit and Loss account *after* the final profit is determined. In a similar manner, amounts credited to valuation reserves, like reserves for depreciation and reserves for uncollectible accounts, are charged to Profit and Loss account and thus reduce the final profit. Amounts credited to accounts representing true reserves of profit are charged to Surplus account, after the final profit has been transferred to that account from Profit and Loss account.

In partnership accounting the entire profit for an accounting period is usually distributed at the end of that period among the partners, either by a credit to their capital accounts or by a credit to their drawing accounts to offset amounts withdrawn. In a corporation the entire amount of profits earned is seldom distributed to the stockholders. It is the custom, rather, to disburse part of the profits in the form of dividends and to leave the balance in surplus account or to "reserve" part or all of the balance for a

specific purpose, such as for the redemption of bonds at maturity or the construction of new buildings. If part of the profits is left in Surplus account, it is usually done for the purpose of building up the general Surplus account, possibly in order to equalize future dividend payments. Surplus account then becomes a kind of store house from which future dividends *may,* if the directors so decide, be paid in lean years, when the regular profits are not sufficient for the purpose or when a final loss for the period has been sustained. But instead of paying dividends "out of surplus" when profits are insufficient, directors often decide to "pass the dividend" and to keep the surplus intact. There is no set rule in the matter. But when the business promises, let us say, to "set aside out of profits" regularly, a certain amount to apply toward the extinguishment of its bonded indebtedness at maturity, a journal entry is made periodically charging Surplus account and crediting "Reserve for Redemption of Bonds" account with the amount agreed upon, so that the directors will not weaken the financial position of the company by paying the amount out in dividends.

Creating true reserves may be compared with withholding and putting into safe deposit boxes some of the profits that might otherwise be distributed to shareholders. They are like the reserves in the army, who are held back to be thrown into the breach when the occasion demands. Examples of true reserve accounts are Reserve for the Redemption of Bond account, Reserve for Contingencies account, and Reserve for Building Improvements account. It must not be presumed, however, that profits locked up in safe deposit boxes called Reserve accounts must necessarily stay there forever. On the contrary, as soon as the objects for which the profits were set aside have been fulfilled, the boxes may be opened and the contents restored to the general warehouse, Surplus account.

To illustrate, let us take first the Reserve for the Redemption of Bonds account and then the Reserve for Contingencies. In the first instance the reserve is created as further protection to the

bondholders against a loss of principal or interest which they might experience as a result of the business sustaining large losses, after having dissipated all its profits in dividends. This protection would be in addition to any which the bondholders might enjoy in holding a mortgage on the company's property or in having the assurance of the law that they must be paid before stockholders shall receive anything.

The bondholders would run no risk of losing anything even if all the profits were paid out each year in dividends to the stockholders, if the business did not sustain a loss in any year during the life of the bonds. The reason for this is apparent when one recalls that profits mean added values coming into the business as a result of trading. Therefore these added values can be taken out again without impairing the asset value originally loaned by the bondholders. On the other hand, if *profits are all withdrawn,* and if losses should then be sustained *in excess of the capital stock,* and if the assets pledged as security for the bonds *did not realize the amount of the bonded indebtedness,* the bondholders would not receive 100 cents on the dollar. Notice that in the foregoing sentence there are three "ifs." It would seem from this as though mortgage bondholders were well protected, and that a clause in the bond promising to create a reserve for the redemption of the bonds at maturity was therefore quite unnecessary. The provision when made may be said to be included with the idea of protecting the payments of interest on the bonds, as much as it is with the idea of guaranteeing the payment of the principal. The bondholders wish to be assured, as far as possible, of receiving a return on their investments because, if the company should default on the interest payments, the bondholders might have to resort to foreclosure proceedings. This they always desire to avoid whenever they can. It is important to remember, however, that an agreement to establish a reserve for the redemption of bonds or for other similar purposes, does not, and cannot in itself, guarantee

that profits will be earned out of which it is promised the reserve will be created.

Now let us assume that all goes well and that the bonds are redeemed at maturity. In this case the profits which have been set aside may be restored to Surplus account by a simple journal entry transferring the credit balance of the reserve account to Surplus.

In regard to a reserve for contingencies, this is created in a similar manner as a reserve for the redemption of bonds, but for another purpose. In this case profits are reserved to absorb the shock of some unusual but possible loss, such as the loss from fire or earthquake, should it occur. Some accountants hold that when such losses are experienced they should be charged against the reserve. We are of the opinion, however, that all losses of whatsoever nature, including losses of this kind, should be charged to Profit and Loss account, where they cannot be overlooked in the preparation of a statement of income and profit and loss, and that if a reserve for contingencies has been created, the balance or a sufficient portion of it, should immediately be restored to Surplus account to offset, as far as possible, the effect of charging the loss to Profit and Loss.

It may be said, however, that a reserve for contingencies is not generally set up unless there is something more or less definite in mind that requires a provision of this kind.

A reserve for contingenices account and a capital surplus account may be held indefinitely apart from Surplus account. If so, they are nothing more nor less than special surplus accounts and represent a part of the net worth of the business, the total net worth being composed of Capital Stock account, Surplus account and the reserves or special surplus accounts.

A summary of items debited and credited to true reserve accounts follows:

TRUE RESERVES

Debited With	Credited With
Amounts restored to Surplus after the purpose for which the reserve was created has been accomplished.	Amounts set aside out of Surplus to fulfill the purpose indicated by the caption of the reserve account.

It does not matter for what purposes reserves are created, they may be wiped out just the same as Surplus account may be wiped out by continuous or exceptionally large losses. The books of a corporation may show large credit balances in reserve accounts, but if the debit balance in Surplus account exceeds the sum of the credit balances in the reserve accounts, the business shows a deficit or impairment of capital in spite of the reserve accounts.

True reserves should be shown on the liability side of a balance sheet under the caption of Reserves, whereas, as stated before, valuation reserve accounts should be deducted from the corresponding asset accounts.

It must not be presumed, however, that reserves, whether they be true reserves or valuation reserves, are peculiar to corporations. They may be found in any business, regardless of the form of organization.

5. Valuation Reserves

Valuation reserves are entirely different from true reserves. Valuation reserves are mere bookkeeping devices to receive the credit temporarily withheld from certain asset accounts until it is convenient to "write off" the assets as worthless, whereas true reserves do not indicate an expense incurred, but rather the withholding of profits from distribution as dividends. It may be argued that the reserve for contingencies is more in the nature of a valuation reserve than a true reserve, for if the contingency happens, the business sustains a loss. But there is a difference between

a reserve for contingencies and a reserve for depreciation, for example, in that the reserve for contingencies is created in order to be conservative and to provide for a possibility, whereas a reserve for depreciation is set up for losses that are certain to be incurred.

Because of the distinction between true reserves and valuation reserves we have, in a previous lesson, referred to the so-called Reserve for Depreciation account and the Reserve for Uncollectible Accounts account as "Provision for Depreciation" account and "Provision for Uncollectible Accounts" account, respectively.

6. Secret Reserves

Secret reserves are reserves that do not appear upon the books, notwithstanding the fact that they exist. Although there are no ledger accounts for secret reserves, and although we are discussing primarily ledger accounts in this lesson, it seems appropriate at this point to offer a few words of explanation in regard to secret reserves.

If the net worth of a business is the excess of its assets over its liabilities, it follows that if any asset is not recorded on the books, the net worth per the books will be less than the real net worth. The same thing holds true if the assets accounts which *do* appear on the books are stated at values less than the assets are worth. If assets are understated or omitted entirely, a "secret" reserve results.

Secret reserves may be said to be due to several causes, but all of them revert to the general proposition of an understatement of assets or of an overstatement of liabilities. Some of the most familiar causes of secret reserves are as follows:

(1) An appreciation of fixed assets due to a change in economic conditions.

(2) An appreciation of investments due to rising market prices.

(3) An understatement of asset values due to excessive depreciation charges having been made.

(4) An understatement of asset values due to having charged to expense certain items that could properly have been capitalized.

While secret reserves have been defended on the ground that they are a source of hidden strength, which may advantageously be revealed in time of trouble, that the creation of any reserve, whether it is secret or disclosed, is conservative accounting practice, and that if the real net worth were known, stockholders might clamor for large dividends when prudence demanded that they should not be paid, the danger of creating secret reserves lies in misleading stockholders or bondholders as to the true worth of their investments. We shall not moralize on the subject further than to say that probably the least harm is done, even in accounting procedure, by accepting as true the old, old maxim that "honesty is the best policy." A policy of conservatism is to be commended, but secret reserves can be revealed and expressed by true reserve accounts or by special surplus accounts, which will serve practically the same purpose. The only difference will be that the readers of balance sheets, as well as the directors, will be "in on the secret."

7. Dividend Accounts

Although directors are not ordinarily obliged to declare a dividend, when they do declare one the dividend becomes a liability of the corporation, and stockholders may demand its payment, if it is not paid on the date set. Therefore as soon as a dividend is declared, a journal entry is in order charging Dividend account (or possibly Surplus account) and crediting Dividend Payable account, for example, somewhat as follows:

December 15, 1921		
Dividend	$15,000.00	
Dividend Payable		$15,000.00

For quarterly dividend of 1½%
on the outstanding common stock
of the corporation ($1,000,000)
declared this day by the Board
of Directors, payable January 15,
1922, to stockholders of record at
the close of business on December 28, 1921. See minutes, page
86.

If dividends are declared quarterly, but the books are not closed until the end of the year, a dividend account may be opened to cumulate the four quarterly installments to be transferred at the end of the year in one sum to Surplus account. If, on the other hand, the dividend is declared annually, it would seem superfluous to open a dividend account, only to close it immediately into Surplus account. In this case it is probably better to charge the dividend directly to Surplus account.

Dividend Payable account remains a liability until the dividend is paid. In the foregoing illustration the dividend was declared on December 15, payable January 15. Therefore if a balance sheet as of December 31, 1921, were prepared from the books of the corporation declaring the dividend, the amount of $15,000.00 should be shown among the current liabilities as a dividend payable. On the books of a business owning the stock, a journal entry somewhat as follows may be made, assuming for this purpose that business B (corporation, partnership or sole proprietorship) owns sixty of the aforementioned outstanding shares of corporation A:

DECEMBER 28, 1921

Dividend Receivable	$90.00	
Dividend		$90.00

For quarterly dividend of 1½% on 60

shares of the common stock of corporation A (par value $100 each) held by us, receivable on January 15, 1922, by stockholders of record at the close of business on December 28, 1921.

If a balance sheet as of December 31, 1921, were to be prepared from the books of business B, the amount of $90.00 would be included among the current assets as a Dividend Receivable, and an equal amount would appear as an item of income in the statement of income and profit and loss. To the corporation which declares the dividend, the dividend is not an expense, but a distribution of profit; to the business or person receiving dividends, dividends are income; and this income, even though the dividend is not payable until some time after the close of the accounting period, may be taken into account in the current accounting period upon the "date of record."

There are three dates pertaining to a dividend as follows:

(1) Date Declared.
(2) Date of Record.
(3) Date Payable.

The directors in declaring a dividend say that the dividend is payable on a certain date to stockholders of record on such and such a date, which is usually a short time after the date of declaration and a short time before the date of payment. Consequently it is customary for a business owning the stock of a corporation to wait until the "date of record" before making the entry charging Dividend Receivable account and crediting Dividend account (in case such an entry is made). Some concerns wait until the cash is received before making any entry at all, thus ignoring the dividend before it is received.

The liability for a declared dividend may be paid possibly in one of several different ways, for example, in cash or other ap-

propriate assets, or in stock, or in scrip, or in bonds issued or owned. The entries for the payment of a dividend will therefore depend upon how the dividend is paid, that is to say as far as the accounts to be credited are concerned. In any case, Dividend account is charged. To illustrate, Cash account would be credited and Dividend account charged if the dividend were a "cash dividend;" Capital Stock account would be credited if the dividend were a stock dividend; Dividend Scrip account would be credited if the dividend were paid in scrip; Liberty Loan Bonds account would be credited if the dividend were paid by a distribution of Liberty Loan bonds owned; First Mortgage, 6% Bonds account would be credited if the dividend were paid by an issue of the company's own bonds of that description.

We will therefore show only the entry for the payment of a cash dividend as follows:

On the books of the A corporation:

January 15, 1922		
Dividend Payable	$15,000.00	
Cash		$15,000.00
For payment of quarterly dividend due today.		

On the books of the B business:

January 16, 1922		
Cash	$ 90.00	
Dividend Receivable		$ 90.00
For receipt of quarterly dividend on 60 shares of A Co., payable January 15.		

Dividend scrip is in the nature of a note payable promising to pay the dividend, usually with interest, at some future date.

A summary of the nature of items debited and credited to Dividend accounts follows:

On the books of the company declaring the dividend:

DIVIDEND ACCOUNT

Debited With	Credited With
Dividends Declared.	Balance transferred to Surplus.

The balance of this account respresents dividends declared but not yet charged to Surplus account.

DIVIDEND PAYABLE ACCOUNT

Debited With	Credited With
Dividends Paid.	Dividends Declared.

The balance of this account represents the company's liability for dividends declared, but not yet paid.

On the books of the business receiving the dividend:

DIVIDEND RECEIVABLE ACCOUNT

Debited With	Credited With
Amount of dividends declared on stock of other companies owned.	Cash received from dividends declared on stock of other companies owned.

The balance of this account represents a right to receive a dividend.

DIVIDEND INCOME ACCOUNT

Debited With	Credited With
Balance transferred to Profit and Loss account.	Amount of dividend declared on stock of other companies owned.

This account represents a source of income.

8. Payment of Cash Dividends

Dividends may be paid by checks drawn against the regular bank account or they may be paid by checks drawn against a special bank account. In the latter case it is usual for the corporation at the time a dividend is payable to draw one check against the regular funds for the total amount of the dividend for deposit either in the same bank, or in another bank to the credit of a special account. Thus a definite cash fund is set aside against which dividend checks are then drawn. This facilitates the reconcilement of the general cash account by relieving it of the burden (usually) of a great many checks, and makes it possible to know at any time the amount of unclaimed dividends, which is the balance of the special account.

If the check referred to above for the total amount of the dividend should be charged to Dividend Payable account, Dividend Payable account would be closed prior to the actual payment of dividends; and there would be no account in the ledger to show the cash on deposit in the special account. Therefore, we believe it is better accounting practice not to charge Dividend account, when the check for the total amount of the dividend is drawn, but to charge "Cash on Deposit to Pay Dividend" account, or an account with a similar title. Then the procedure would properly be to journalize periodically (as often as the bank reports payments) the amount of dividend checks paid by the bank, charging Dividend Payable account and crediting Cash on Deposit to Pay Dividends. This procedure is quite proper, even though it is not usual to

journalize cash transactions. The merit of this plan is, that if it is followed, the books are made to reflect the true facts, in case some of the dividend checks are not cashed, namely that a liability to pay a certain amount of dividends still exists but that there is a corresponding amount of cash on deposit to meet that liability. If the first plan is followed, both the liability and the special deposit are ignored on the books.

9. Cumulative Preferred Dividend Payable Account

As no liability, even for cumulative dividends, exists prior to a declaration of the dividend by the board of directors, it is not necessary to "accrue" the liability for cumulative dividends on the books of the corporation issuing the stock. For example, suppose a company had been in the habit of paying regularly on April 1 and October 1, semi-annual dividends on its $500,000.00, 7% preferred stock outstanding. In preparing a balance sheet as of December 31, it would not be necessary to accrue three months' dividend.

As dividends are not a liability until declared and after being declared are not an expense, it is futile to attempt to accrue them as one would accrue interest on bonds. Some concerns, however, do consider preferred dividends as "fixed charges," but there is a legal distinction between the amounts paid to bondholders and amounts paid to preferred stockholders, however closely related they may appear to be, in that the bondholder is entitled to interest without a special dispensation of the board of directors, whereas even a preferred stockholder is dependent for his dividend upon the action of the board. Consequently in our opinion, no cognizance should be taken of cumulative preferred dividends until they are declared, when they should be credited to Cumulative Preferred Dividend Payable account. If, however, a company is in arrears in the payment of cumulative preferred dividends, a footnote stating the amount unpaid should be shown on the company's balance sheet in order that all who read the balance sheet may be aware of the condition.

10. Good-Will Account

As stated in Lesson 28, a Good-Will account should not arbitrarily be created on the books of any business. The only time when a Good-Will account should be opened is when good-will is actually bought or sold.

On the books of the vendor, Good-Will account may be charged with the amount for which the good-will was sold, the corresponding credit being to Profit and Loss account or to Capital account.

The Good-Will account would then be closed in the entry charging the purchaser for the assets taken over.

On the books of the purchaser, Good-Will account may be charged with the amount paid for good-will. The question then arises as to what should be done with the account after it is opened; should it be allowed to remain on the books as an asset at its cost price, or should it be "written off" over a period of years? Some concerns prefer to "write it off," although good reasons may be advanced for leaving it on the books. Perhaps one reason for wishing to write off good-will is that the word has come more or less into disfavor, owing to certain improper practices which have been committed in its name. We allude particularly to the practice of purchasing assets from interested parties for an exaggerated amount and excusing the transaction under the guise of having purchased good-will, when in reality good-will did not exist, or at least only a comparatively small amount of it. Another way Good-Will account has been abused has been by charging Good-Will and crediting Surplus to cover up an actual deficit. For a company to create a good-will account when it is insolvent, in order to try to conceal its condition of insolvency, is, to say the least, not good accounting practice.

At any rate directors are sometimes loath to see the word good-will appearing in balance sheets of their company, preferring to adjust the value of other assets purchased so as to absorb the amount actually and legitimately paid for good-will.

Good-Will is intangible, but when it really exists it may be as potent a factor in earning profits for the business as a patented machine. To feel the force of this remark one has only to consider for a moment the difficulty of starting a business in competition with an old established, well-liked, and well-known concern, especially one operating under a nationally advertised trade name.

If, after good-will has been purchased, a business continues to thrive, it cannot be very well said that its good-will has disappeared. Therefore there is good reason for not writing off the account. Some business men have held that good-will should be written off in order "to be conservative," but the same reason might be advanced for writing off any asset, tangible or intangible.

When good-will has been written off, it has usually been done when sufficient profits have been earned to absorb the charge, and yet when the business is profitable, its good-will does not depreciate. On the other hand, when losses are being sustained, no one likes to increase the amount of the losses by writing off good-will, and yet that is the time, if ever, when good-will should be written off.

The accepted practice seems to be not to write off good-will, but to allow it to remain on the books at its cost price.

11. Patents and Copyrights Account

A patent is the right granted by a government to an inventor to make exclusive use of his invention for a specified length of time. In this country protection under a patent is granted for seventeen years, with the opportunity of renewal if some distinctly new feature is introduced.

Inventors often sell their patent rights to corporations or other business organizations for a definite sum, or for a nominal sum with a contract for "royalties" or for a certain amount per each unit produced or sold under the patent. Some inventors who have sold their patents on the royalty basis and have not had a clause

included in the contract that a minimum number of units were to be produced each year, have found their efforts in vain when the purchaser who secured the patent for a small sum decided not to use it for one reason or another. The price a company pays for patents which it does not intend to·use should be written off completely.

The amount paid for a patent is a capital expenditure, although the asset is of an intangible nature. The asset, however, should be written off in equal installments over the accounting periods covered by the life of the patent. This does not mean that the patent should not be written off before the expiration of its life, but that it must not be continued as an asset after the patent right has expired. The patent may and should be written off as soon as it is found to be of no value, if it should become worthless before the end of the seventeen years. The amounts written off should be charged to a manufacturing expense account; consequently as soon as a patent is completely written off, the cost of manufacture will not include an item of depreciation for that particular patent. This will partly compensate for the drop in price of a patented article which usually occurs as soon as the patent expires.

Amounts paid for royalties are likewise manufacturing expense.

The amount paid for a patent is capitalized on the theory that a patent has an inherent earning power due to the monopoly it creates.

If the business is owned by the inventor, the amounts expended in experimental work and in securing the patent may be considered as the cost of the patent.

The same theory applies to amounts paid for copyrights as applies to amounts paid for patents. Copyrights are granted to authors and artists, to publish or to sell their works for a certain

limited time, in much the same way as a patent is granted to an inventor.

12. Trade Mark Account

Trade-Marks may be purchased in the same way as patents or copyrights. The amount paid for a trade-mark is properly chargeable to an asset account. This asset account may remain as long as the trade-mark is used. If the trade-mark should be discontinued, the account should be written off to Profit and Loss. A trade-mark differs from a patent in that it has an unlimited life as long as it is used. A patent, on the other hand, does not expire through disuse. It expires only through lapse of time.

13. Franchise Account

A franchise is a grant of a special privilege from a sovereign power, such as the right to lay tracks and operate cars in the streets of a city, or the right to construct conduits for telephone wires and the like. Franchise accounts are most frequently found in connection with public utilities.

The original cost of securing a franchise, by payment to the state or political subdivision thereof, is properly chargeable to an asset account. This does not mean, however, that amounts paid subsequently as "franchise taxes" should be charged to Franchise account. Such disbursements should be charged to Taxes account.

Franchises are sometimes perpetual. If a franchise is granted for a limited time, the cost of securing the franchise should be written off to operating expenses in equal installments over the accounting periods within the life of the franchise.

14. Patterns and Drawings Account

This is an asset account to record the cost of patterns or drawings on hand essential to the manufacture of a product. The life of such assets is often comparatively short. Therefore some concerns carry the value of patterns and drawings on their books

at a fixed amount which they estimate to be about their average investment in this kind of asset, and charge the cost of patterns and drawings made during an accounting period directly to cost of manufacture for that period.

15. Organization Expense Account

Items properly chargeable to Organization Expense account include incorporation fees paid to the state, office and other expenses incurred prior to organization, the cost of obtaining subscriptions to the capital stock, lawyers' fees for organization work done, the cost of preparing stock certificates, and similar expenses. Organization Expense account may be carried as a deferred charge, but it is considered the best practice to write it off as soon as possible, at least within three years.

16. Surplus Adjustment Account

This is an account which is often used to include items of profit or of loss during a current accounting period which really belong to a prior period, but which were not included in the profit and loss of a prior period through oversight or for some other reason. The theory of this account is that its balance "adjusts" the balance of Surplus account at the beginning of the period to what it would have been if the "prior period" items had been charged or credited to Profit and Loss during the period to which they really belonged. This account has some advantages, but it should not be burdened with a great many small items merely because those items, strictly speaking, happened to belong to a prior period. If it is so burdened, the account only has to be thoroughly analyzed and the items properly grouped for the preparation of a statement of income and profit and loss. The practice of showing items of expense and earnings of a prior period separately from those of the current period was discussed and some of the disadvantages of this procedure were explained in the lessons on the statement of income and profit and loss.

17. Summary Review

What has been said on the subject of corporations may be summarized as follows:

(1) That the chief advantages of a corporation are its practical perpetuity and the limited liability of stockholders.

(2) That the corporation is an artificial person deriving its authority from the state.

(3) That the ownership of a business corporation is represented by shares of capital stock.

(4) That the management of a corporation is vested in a board of directors and officers whom they appoint.

(5) That capital stock may be preferred or common.

(6) That preferred stock may have a preferential right in the distribution of assets upon dissolution of the corporation, as well as to dividends paid while the corporation is a going concern.

(7) That preferred stock may be cumulative or non-cumulative as to dividends.

(8) That profits need not be distributed in the form of dividends, even though earned, the board of directors having the sole right to declare a dividend.

(9) That as soon as a dividend is declared, it becomes a liability of the corporation, but not before.

(10) That in a given year a preferred stockholder should share equally with a common stockholder in dividends after both have received the amount of dividend specified in the preferred certificate, unless provision is made to the contrary. This question is more or less an undecided one, and to avoid misunderstandings preferred stock certificates should be specific as to the rights of preferred stockholders.

(11) That preferred stock is often issued subject to redemption at a certain price, or with conversion privileges.

(12) That the principal books of a corporation outside of the general accounting records are: (a) Minute Book; (b) Stock Certificate Book; (c) Stock Ledger; (d) Stock Transfer Book; (e) Register of Transfers; and (f) Installment Book.

(13) That stock must ordinarily be issued for cash, property or services equal in value to the par value of the stock issued. That is to say, stock cannot be sold for less than par on the original issue, except in unusual cases.

(14) That stock may be issued "partly paid," but if that is done it should be so indicated on the stock certificate. Partly paid stock is subject to calls for the unpaid balance.

(15) That stock is sometimes issued without par value.

(16) That the authorized capital stock of a corporation may be increased or decreased by due process of law.

(17) That watered stock signifies "overcapitalization."

(18) That cumulative voting privileges means the right of a stockholder to "cumulate" his votes if he desires. For example, he may cast seven votes for one director if he likes, or he may scatter his seven votes over several directors.

(19) That Treasury Stock is stock *that has once been issued,* but has returned to the treasury of the corporation by gift or by purchase.

(20) That stock dividends do not increase the equity of the stockholder in the corporation.

(21) That a corporation usually acquires borrowed capital by an issue of bonds.

(22) That the classification of bonds is extensive.

(23) That the principal distinction between mortgage and debenture bonds is that the former are secured and the latter are not.

(24) That the principal distinction between registered and coupon bonds is that the ownership of the former is recorded on the books of the company, whereas the ownership of the latter (usually) is not.

(25) That in opening the books of a corporation, the same general rules of debit and credit are observed; asset accounts are debited representing the property acquired; liability accounts are credited representing the liabilities (if any) assumed; and capital stock account is credited for stock issued.

(26) That there are two generally different methods of opening books of a corporation. If one method is followed, ledger accounts for authorized stock and unissued stock are opened, but none for issued stock. If the other method is followed, a ledger account is opened for issued stock, but none are opened for authorized stock and unissued stock.

(27) That there should be separate ledger accounts for each different kind of stock issue.

(28) That installment accounts are sometimes opened for each installment due on subscriptions; that this plan makes it convenient to find out how much is past due, if anything, on subscriptions.

(29) That opening the books of an incorporated partnership is in effect transferring the credit of partners' capital accounts to a capital stock account.

(30) That the opening entries for the incorporation of several partnerships follow the same general rules as the entries for incorporating a single partnership.

(31) That profits derived from the sale of treasury stock should be credited to a capital surplus account and not to Profit and Loss.

(32) That preferably treasury stock should be carried at par value; that it is considered better to deduct Treasury Stock account from Capital Stock account on the balance sheet rather than to include it on the asset side.

(33) That separate bond accounts should be opened for each different issue of bonds.

(34) That Surplus account ordinarily signifies surplus available for dividends.

(35) That special surplus and reserve accounts are created to set aside a portion of surplus for permanent or special reserve purposes.

(36) That valuation reserves, such as a reserve for depreciation, are mere bookkeeping expedients to avoid crediting asset accounts immediately with loss of values; that true reserves, on the other hand, are a part of the surplus of the business.

(37) That secret reserves are true reserves which do not appear on the books.

(38) That Dividend Payable account is credited upon the declaration of a dividend on the books of the company declaring the dividend, and charged with the payments of dividends.

(39) That Dividend Receivable account is debited on the books of the company holding the stock, and Dividend (income) account is credited, on the date known as the "record" date.

(40) That good-will is not ordinarily subject to depreciation, but that patents, copyrights, patterns, organization expense, and franchises (unless perpetual) are subject to depreciation.

(41) That Surplus Adjustment account is often opened to receive charges and credits for losses and profits which, strictly speaking, belong to a prior period, but which have to be taken up on the books during the current period.

QUESTIONS

Lesson 36

1. Assume that Surplus account showed a debit balance of $100,000 and that there were three reserve accounts with credit balances as follows:

Reserve for Depreciation of Plant and Property	$40,000
Reserve for Sinking Fund Bonds	80,000
Reserve for Contingencies	10,000
Total	$130,000

Would the balance sheet show an impairment of capital? Give reasons for your answer.

2. Explain the meaning and object of a Capital Surplus account, and give five examples of capital surplus accounts.

3. Explain the distinction between Surplus account of a bank and Surplus account of an ordinary mercantile business.

4. Tell in a few words what the surplus of a corporation is.

5. What does the balance of Surplus account of an ordinary mercantile corporation represent?

6. Explain the difference between true reserves and valuation reserves.

7. Assuming that it had been decided by the board of directors to increase the book value of certain fixed asset accounts as a result of an appraisal, what account (or accounts) would you, as an accountant, credit as an offset? Give reasons for your answer. Would you under any circumstances vary the account credited? If so, when and why?

8. Explain why the sinking fund clause is included in the so-called sinking fund bonds providing for the setting aside "out of profits" a certain amount periodically with a trustee, which amount with compound interest should exactly equal the amount of the sinking fund bonds at maturity.

9. Explain the nature of the debits and credits to a true reserve account, and the nature of the debits and credits to a valuation reserve account.

10. What is a secret reserve? Name five causes of secret reserves.

11. Corporation A was organized on January 2, 1918, with an authorized issue of $500,000, 7%, cumulative preferred stock and an authorized issue of $600,000 common stock, both of which were fully issued. The corporation paid semi-annually dividends on the preferred stock of 2% on January 15 and July 15 during 1919, 1920 and 1921 which were declared 18 days prior.

On December 28, 1921, it declared an 8% dividend on the preferred stock, payable January 15, 1922. Submit transcripts of two accounts which should appear on the books of the corporation in connection with the preferred dividends exclusively, and indicate in the transcript of each account the account debited or credited as an offset to each entry. Also submit a simple balance sheet for the corporation as of December 31, 1921, assuming that the total gross assets of the corporation amounted to $1,236,000 and that its surplus amounted to $30,000.

12. Referring to question 2, Lesson 35, open the books of the Blank Manufacturing Company with accounts for Unissued Stock and Authorized Stock, numbering the journal entries in consecutive order from one up. Indicate in what respects the journal entries would be the same and in what respects they would differ if you adopted the other method of setting up an account for the issued stock but none for the unissued and the authorized stock.

13. Corporation X was successful in selling an issue of $500,000, 6%, First Mortgage bonds, due Aug. 1, 1943, to the public for cash at 102, but an issue of $400,000, 6%, Debenture Bonds, due April 1, 1930, had to be sold at 96. These also were sold to the public for cash. Submit the cash book entries in both cases in journal entry form.

14. Name seven kinds of expenses that may be charged to Organization Expense account.

15. What three dates are there in connection with dividends? Explain each.

16. When may Good-Will account properly be opened and when should it theoretically be written off? What practical objection is there to writing off Good-Will?

17. Name and explain the nature of two other intangible assets besides good-will, and tell why they can be considered of real money value, although they cannot be seen nor touched.

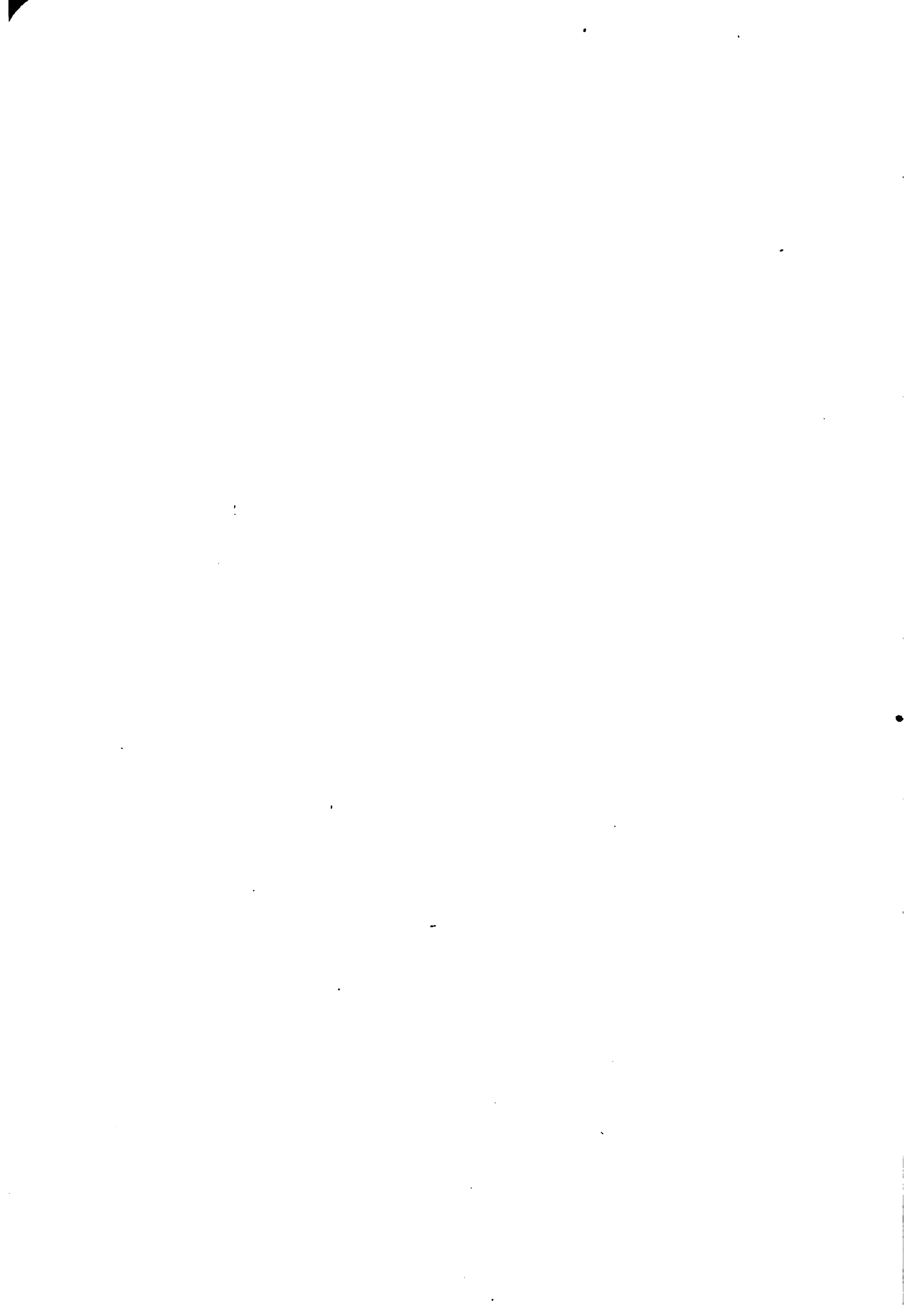
18. Explain the theory of Surplus Adjustment account.

19. Make an outline of Lessons 31 to 36 (both inclusive).

20. From the following ledger balances of the R. G. Green Company, at July 31, 1922, prepare a balance sheet. You are supposed to know whether the balances are debit or credit.

Account	Amount
Reserve for Uncollectible Accounts	$ 4,350
Deposits on Account of Gas and Electricity	150
Agents' Working Funds	1,950
Trade Acceptance Payable	15,000
Accrued Interest Receivable	450
Cash with Sinking Fund Trustee	18,000
Advances to R. G. Green, President	1,000
Unidentified Cash Receipts	950
Authorized Common Capital Stock	400,000
Buildings	205,000
Cash	28,000
Notes Receivable Discounted	10,000
Furniture and Fixtures	2,500
Notes Receivable on Account of Stock Subscriptions	11,000

Inventory, Work in Process	45,000
Unissued Preferred Stock	225,000
Cash (Special Deposit) to Pay Dividends	10,000
Bond Coupons Payable	150
Surplus from Sale of Donated Treasury Stock (common)	15,000
Advances for Materials and Supplies Purchased	9,400
Taxes Paid in Advance	2,500
Surplus	296,760
Securities Owned	15,000
Authorized Preferred Capital Stock 7% Cumulative	250,000
Accrued Wages	4,200
Plant Equipment	200,000
Inventory—Material and Supplies	18,250
Accrued Interest Payable	7,500
Surplus from Revaluation of Fixed Assets	40,000
Land	50,000
Customers' Accounts	445,000
Cash (Special Deposit) to Pay Bond Interest	150
Reserve for Redemption of Sinking Fund Bonds	18,000
Trade-Marks	2,000
Reserve for Donated Treasury Stock (common)	5,000
Unissued Common Stock	200,000
Notes Payable—Loans	5,000
First Mortgage, 6%, Sinking Fund Bonds, due 1946	300,000
Reserve for Contingencies	10,000
Good-Will	10,000
Reserve for Depreciation	75,000
Treasury Stock (at par)	5,000
Dividend Payable	10,000
Accounts Payable	146,000
Patents	5,000
Unexpired Insurance	1,610
Organization Expense	1,500
Bond Discount	14,000
Inventory—Finished Goods	60,000
Notes Receivable	25,000
Advances to Employees	450



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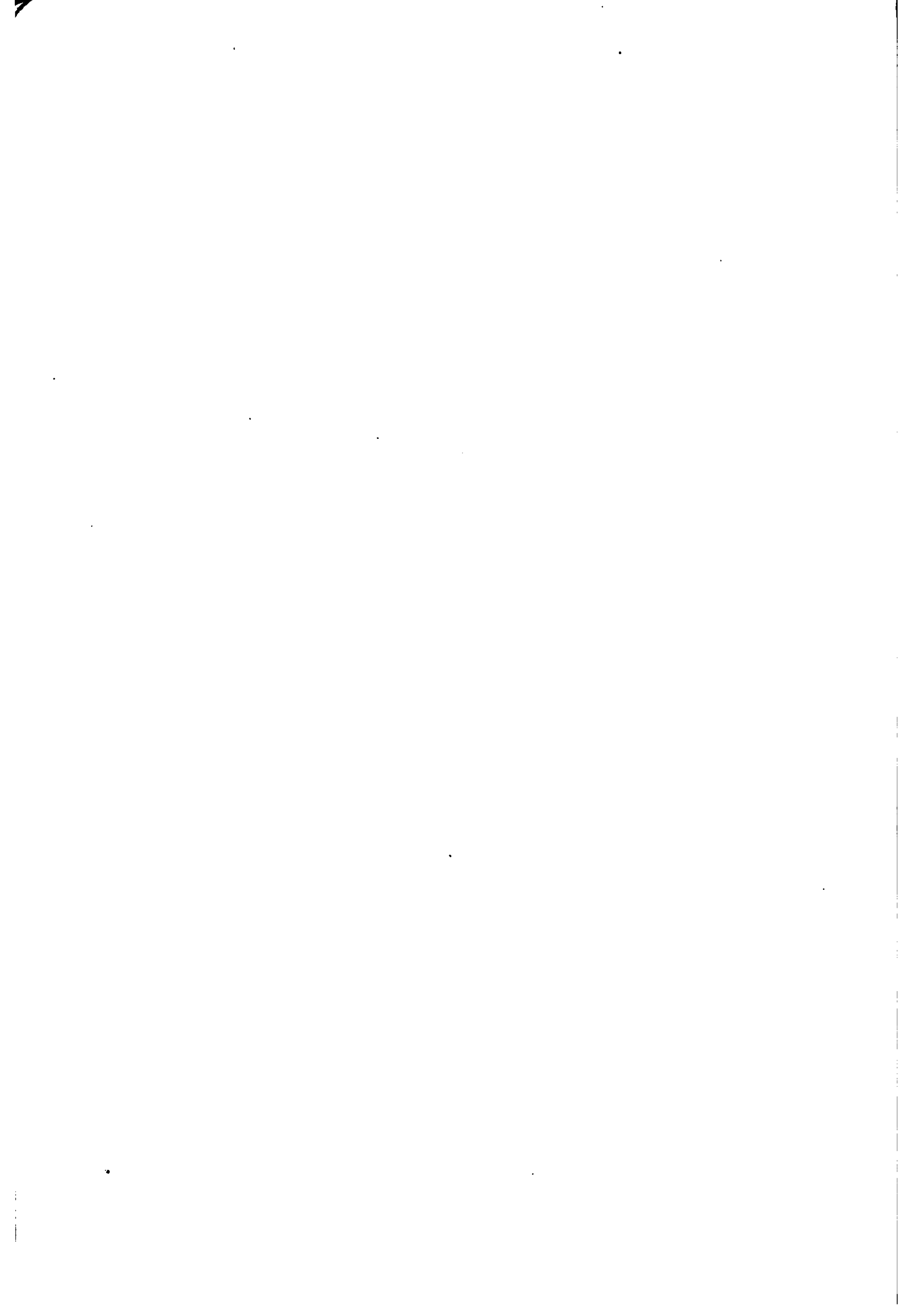

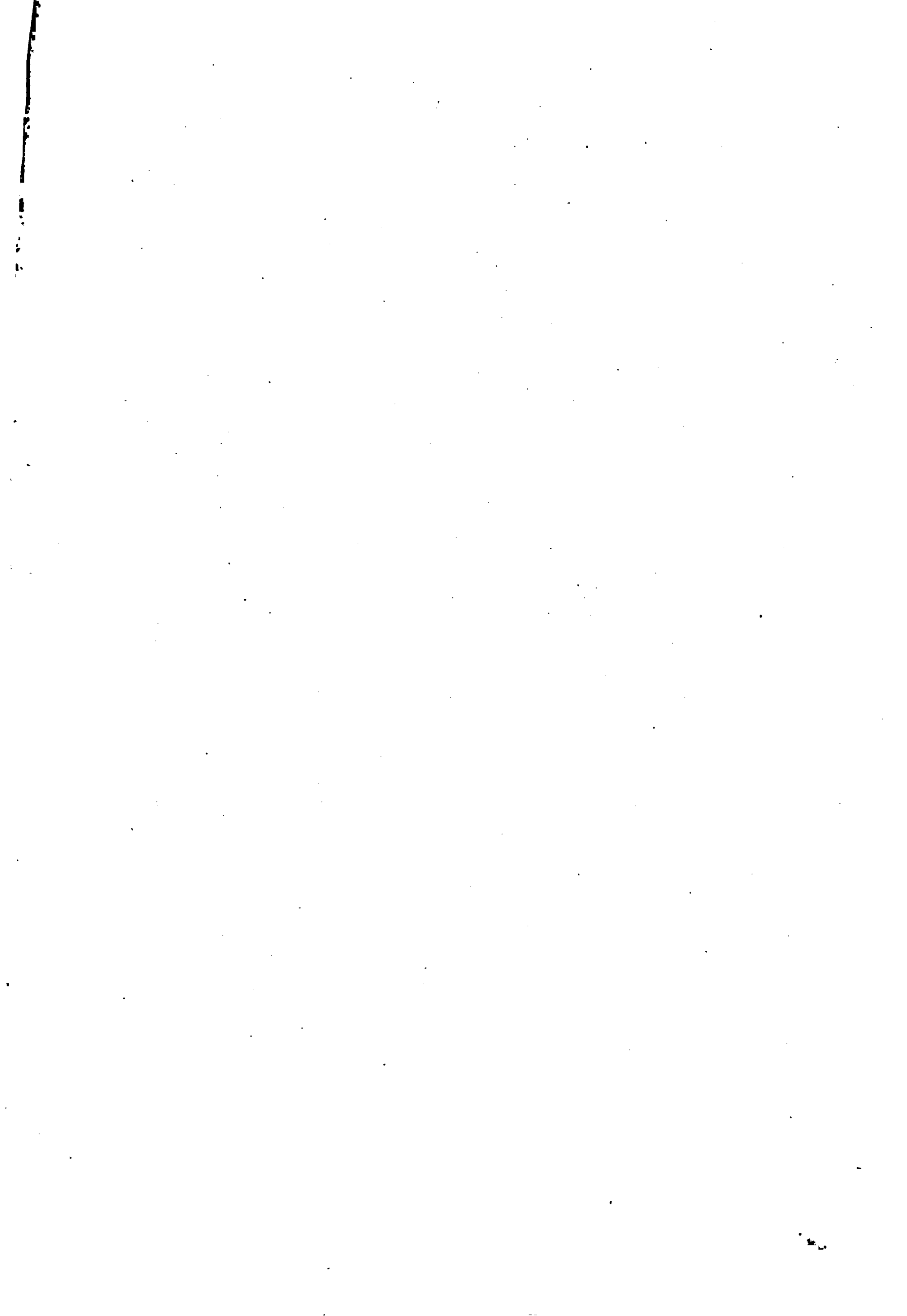

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

AN INITIAL FINE OF 25 CENTS
WILL BE ASSESSED FOR FAILURE TO RETURN
THIS BOOK ON THE DATE DUE. THE PENALTY
WILL INCREASE TO 50 CENTS ON THE FOURTH
DAY AND TO $1.00 ON THE SEVENTH DAY
OVERDUE.

SEP 12 1932

DEC 5 1932

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DEC 20 1932

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